

Joint Meeting of the MPO Policy Boards

September 29, 2021



Roll Call – CAMPO Executive Board

- ☐ City of Creedmoor
- ☐ City of Raleigh
- ☐ County of Franklin
- ☐ County of Granville
- ☐ County of Harnett
- ☐ County of Johnston
- ☐ County of Wake
- ☐ GoTriangle Board of Trustees
- ☐ NC Board of Transportation

- ☐ Town of Angier
- ☐ Town of Apex
- ☐ Town of Archer Lodge
- ☐ Town of Bunn
- ☐ Town of Cary
- ☐ Town of Clayton
- ☐ Town of Franklinton
- ☐ Town of Fuquay-Varina
- ☐ Town of Garner

- ☐ Town of Holly Springs
- ☐ Town of Knightdale
- ☐ Town of Morrisville
- ☐ Town of Rolesville
- ☐ Wake County
- ☐ Town of Wake Forest
- ☐ Town of Wendell
- ☐ Town of Youngsville
- ☐ Town of Zebulon



Roll Call – DCHC Executive Board

- ☐ City of Durham
- ☐ County of Chatham
- ☐ County of Durham
- ☐ County of Orange
- ☐ GoTriangle
- ☐ NC Board of Transportation
- ☐ Town of Carrboro
- ☐ Town of Chapel Hill
- ☐ Town of Hillsborough



Public Comments

- Speakers will be unmuted when Chair calls name; in order of sign up
- Please limit your comments to **two** (2) minutes.
- Provide your full name and any organization you are representing.

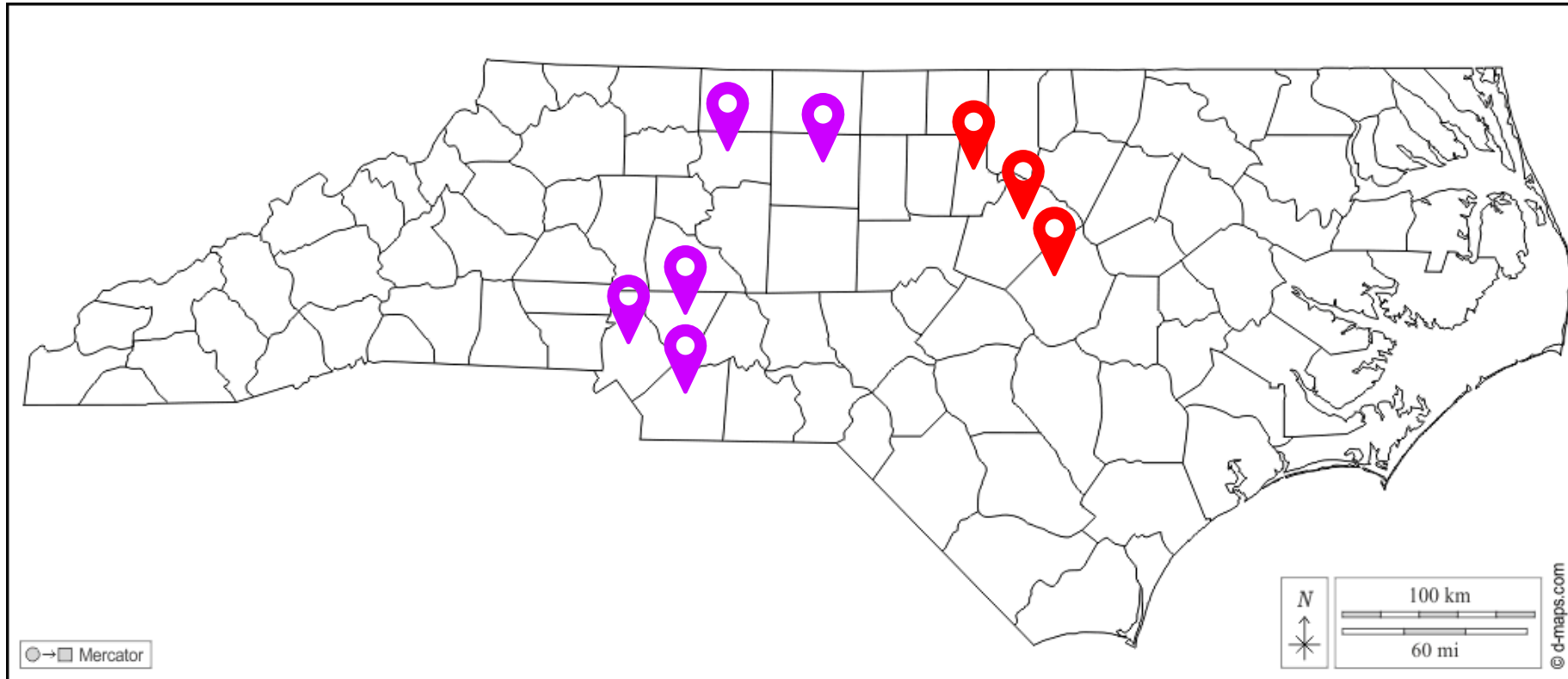
ORDER	NAME
1.	Kym Hunter
2.	Harry Johnson
3.	Mary Sell
4.	Terry Lansdell
5.	Nathan Spencer
6.	John Tallmadge
7.	Mary-Jo Gellenbeck
8.	Dwight Otwell
9.	Jasmine Washington
10.	Tina Govan
11.	Nick Neptune
12.	Heidi Perry
13.	Chad Jones



Census Snapshot/Demographic Changes



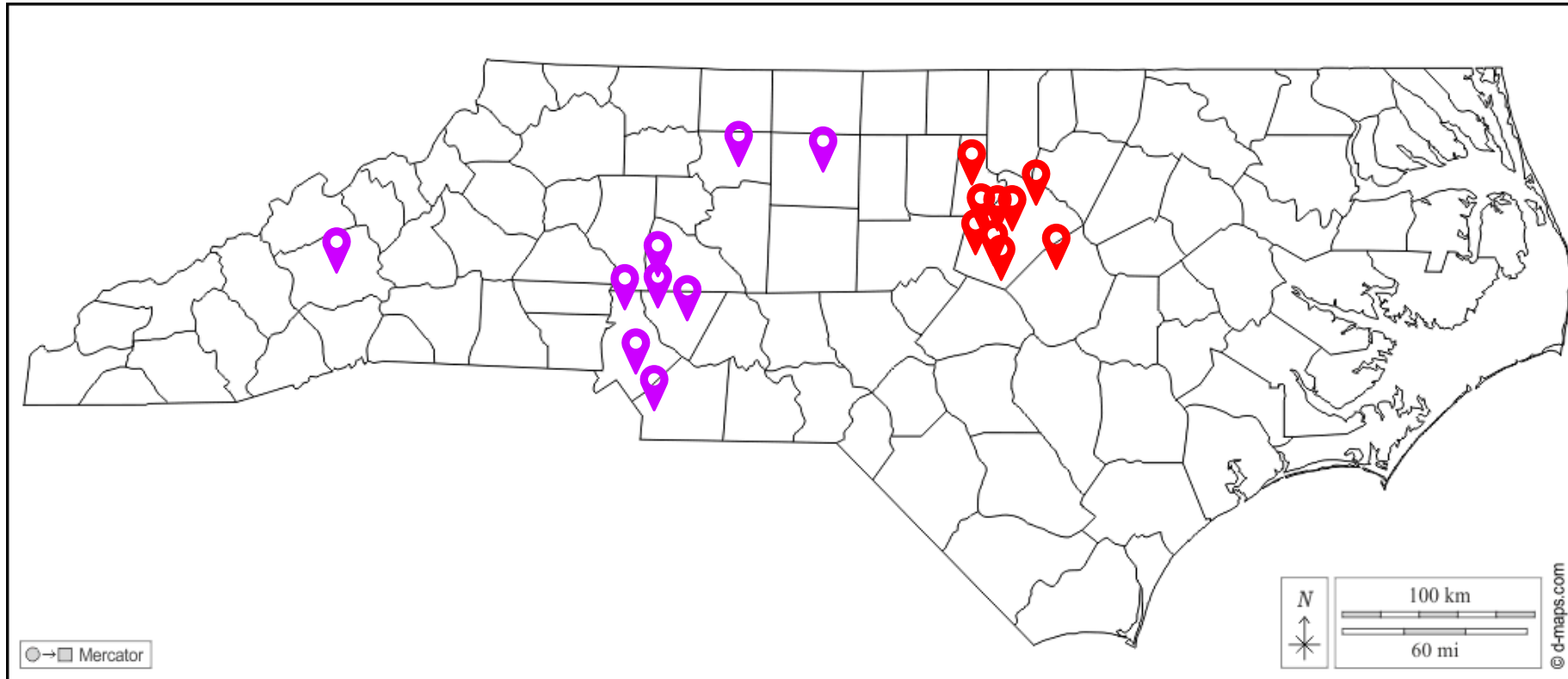
Demographic Change Snapshot -- Counties



NC grew by 900,000 people between 2010 and 2020

- 330,000 of this growth was in Wake, Durham and Johnston Counties (37%)
- 700,000 of this growth was in 8 counties in the “Big 3” metro regions (77%)

Demographic Change Snapshot -- Municipalities



18 NC cities & towns added 10,000+ people between 2010 and 2020

- 9 of them are in the Triangle and added a combined 250,000 residents
- 7 of NC's 25 largest cities are in the Triangle, each with >40,000 residents



NORTH CAROLINA
Department of Transportation



Integrated Mobility Division Strategic Initiatives

Ryan Brumfield, PE
Director

September 29, 2021

The Landscape of Mobility is Changing



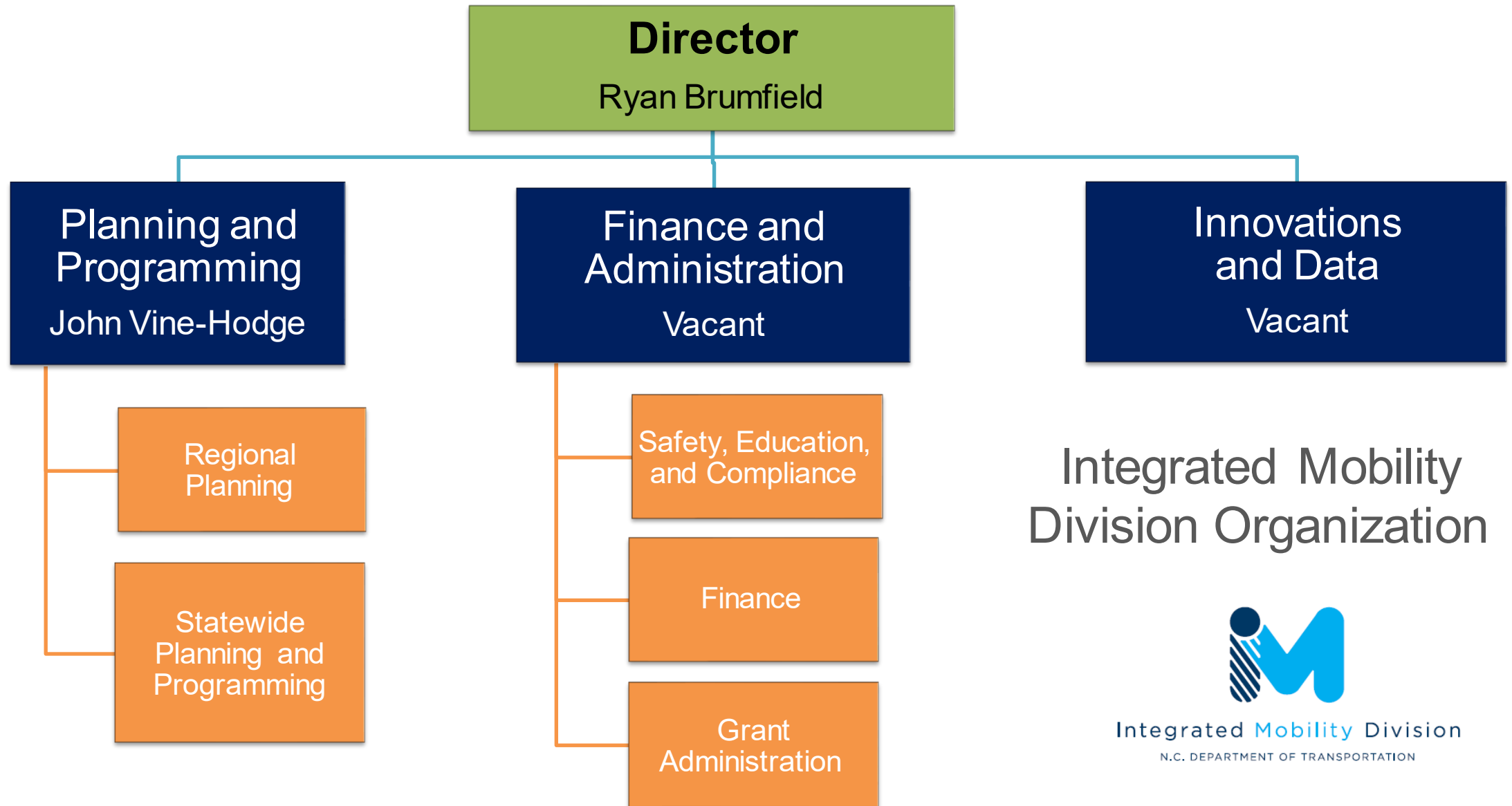


Multiple Modes Under One Division



Integrated **Mobility** Division

N.C. DEPARTMENT OF TRANSPORTATION





Integrated **Mobility** Division

N.C. DEPARTMENT OF TRANSPORTATION

Mission

Provide leadership for safe, affordable, and innovative multimodal transportation throughout North Carolina

Core Goals:

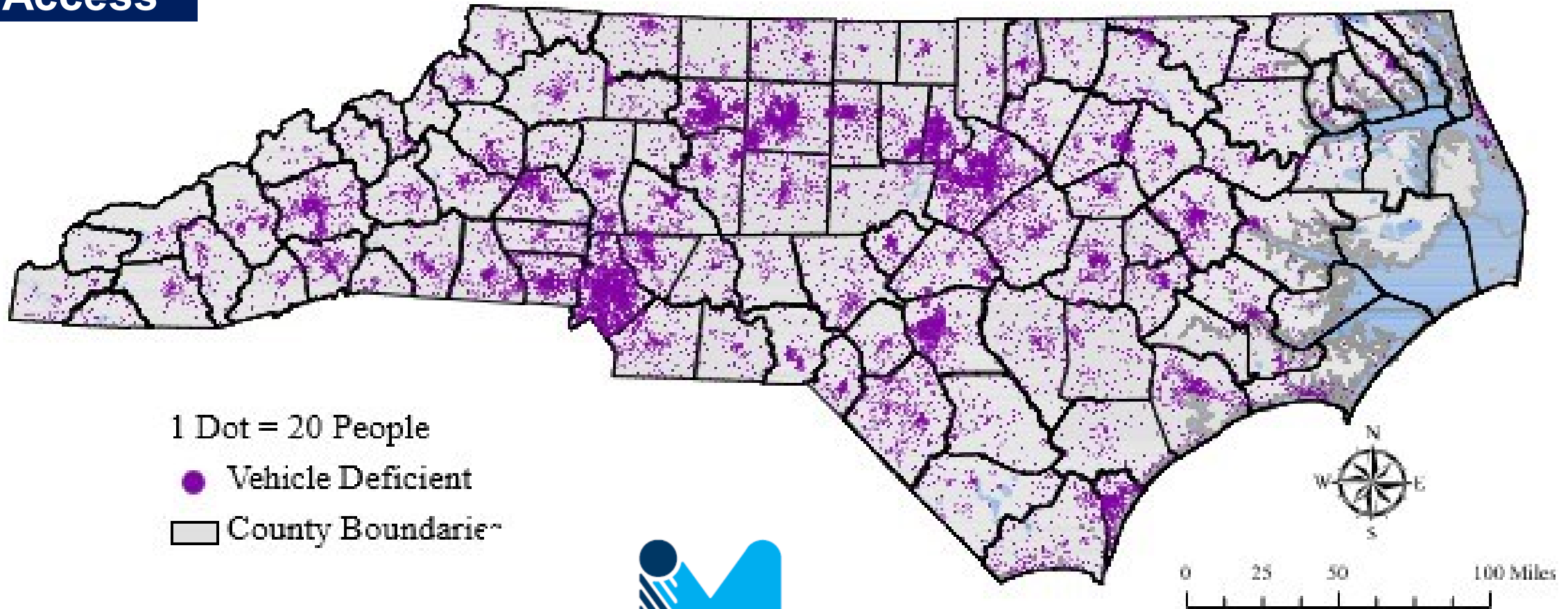
**Increase
Access**

**Enhance
Quality of Life**

**Ensure
Safety**

**Increase
Access**

Adults Without a Vehicle in NC



Integrated Mobility Division
N.C. DEPARTMENT OF TRANSPORTATION

Enhance Quality of Life



Multimodal options lead to healthier lifestyles



Replace 2 miles of driving with walking or biking x 365 days =



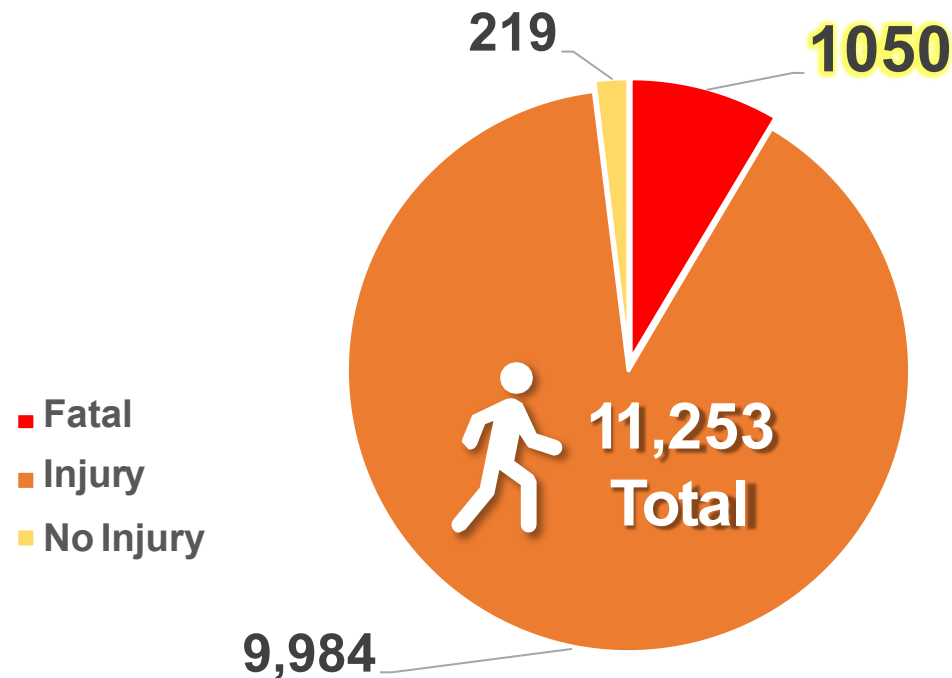
Multimodal options lead to better environmental outcomes



Ensure
Safety

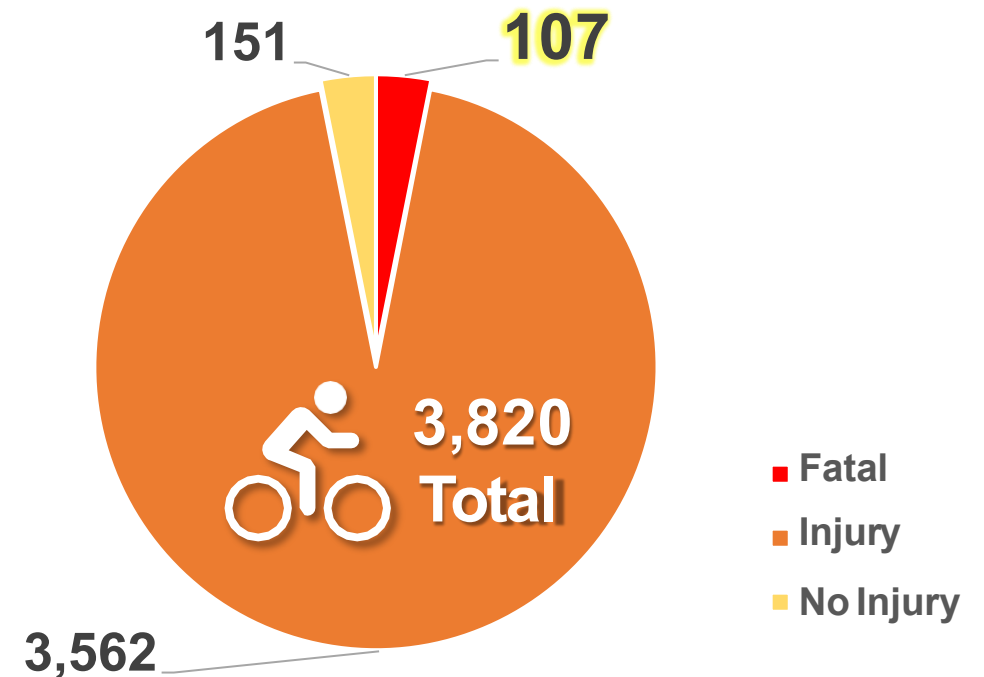
Bicycle & Pedestrian Safety Trends

Pedestrian Crashes, 2015-2019



NC 7th highest total pedestrian fatalities by state

Bicycle Crashes, 2015-2019



NC 10th highest rate of bicycle fatalities per

Envision the Future of Transportation

- Technology streamlines cross-jurisdictional trip coordination and improves safety.
- Local and regional multimodal transportation options rival driving in terms of time, convenience, and cost.
- All transportation network users are accommodated safely.
- Land use and transportation planning are intertwined.
- Residents are happier, healthier, and more likely to participate and succeed in the economy.

IMD's Innovation Process

1. Understand emerging mobility trends and challenges
2. Develop ideas
3. Secure grant funding
4. Pilot innovations
5. Deploy broadly and disseminate best practices

Recent Examples



Mobility for All Project

NCCARE360

ICPTA



City of Wilson



HOPE Grant

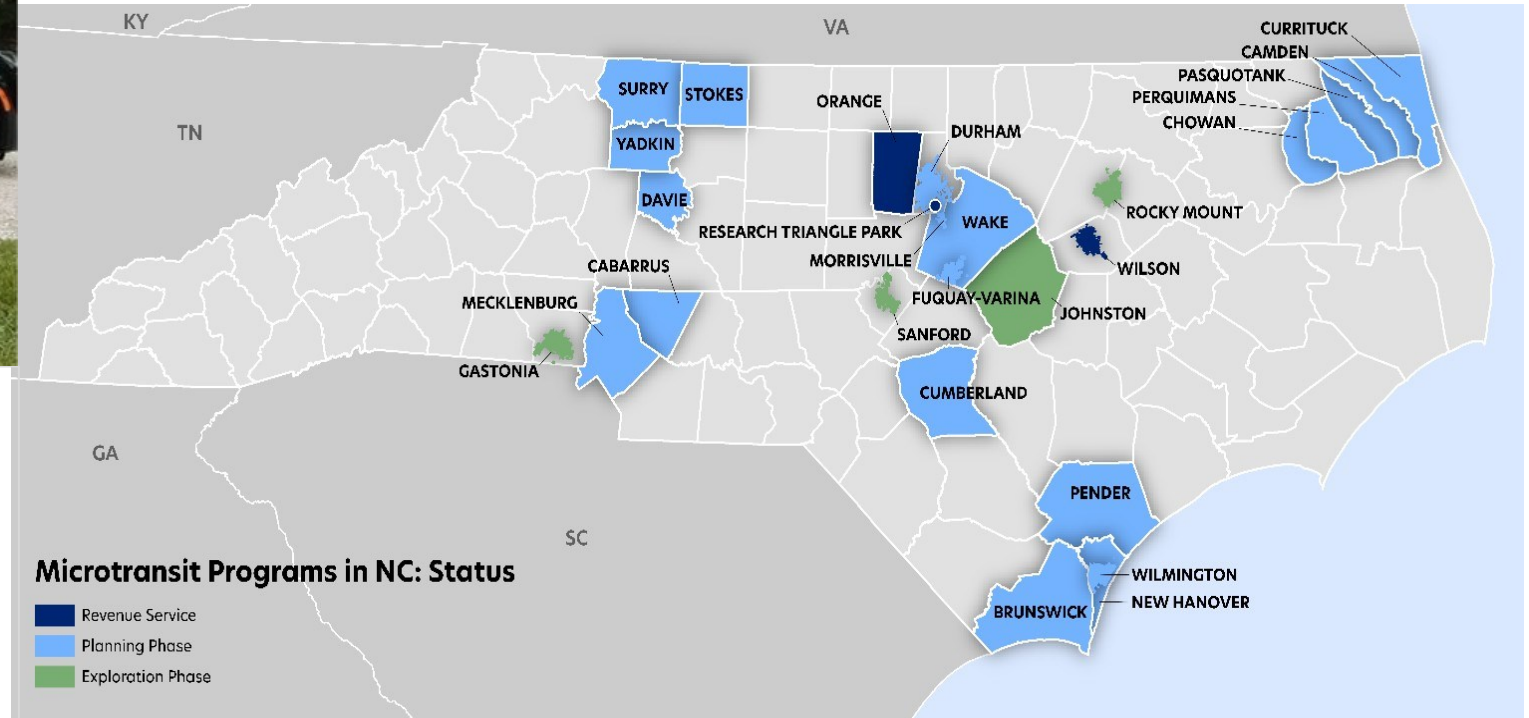
AppalCart



On-Demand Microtransit

- Similar to rideshare services like Uber or Lyft, but subsidized and provided as a form of public transportation.
- 15 minute average wait time after requesting a ride.
- First pilot launched in September 2020 and has been highly successful, doubling transit ridership in Wilson, even amid the pandemic.
- NCDOT is actively exploring additional deployments with communities throughout the state, including Wake and Lee Counties

Leading on Technology and Innovation to Improve Quality of Multimodal Options



State funding opportunities exist through ConCPT and other state programs to expand cross-jurisdictional, coordinated public transit services.

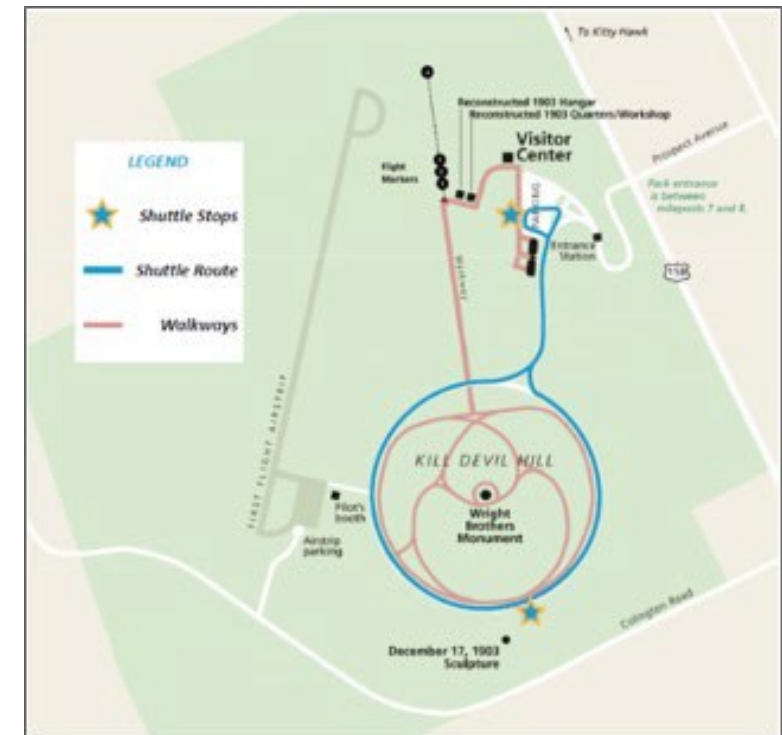
IMD's Transit Technology Outlook

- Residents can plan, schedule, and pay for all transportation in one place
- Truly on-demand transit (day-of or hour-of pickup) statewide with seamless cross-jurisdiction trips
- Statewide advanced scheduling software, supplemented with Transportation-as-a-Service (TaaS) in some locations, connected by Mobility-as-a-Service (MaaS)
- RFP by end of 2021 for advanced scheduling software

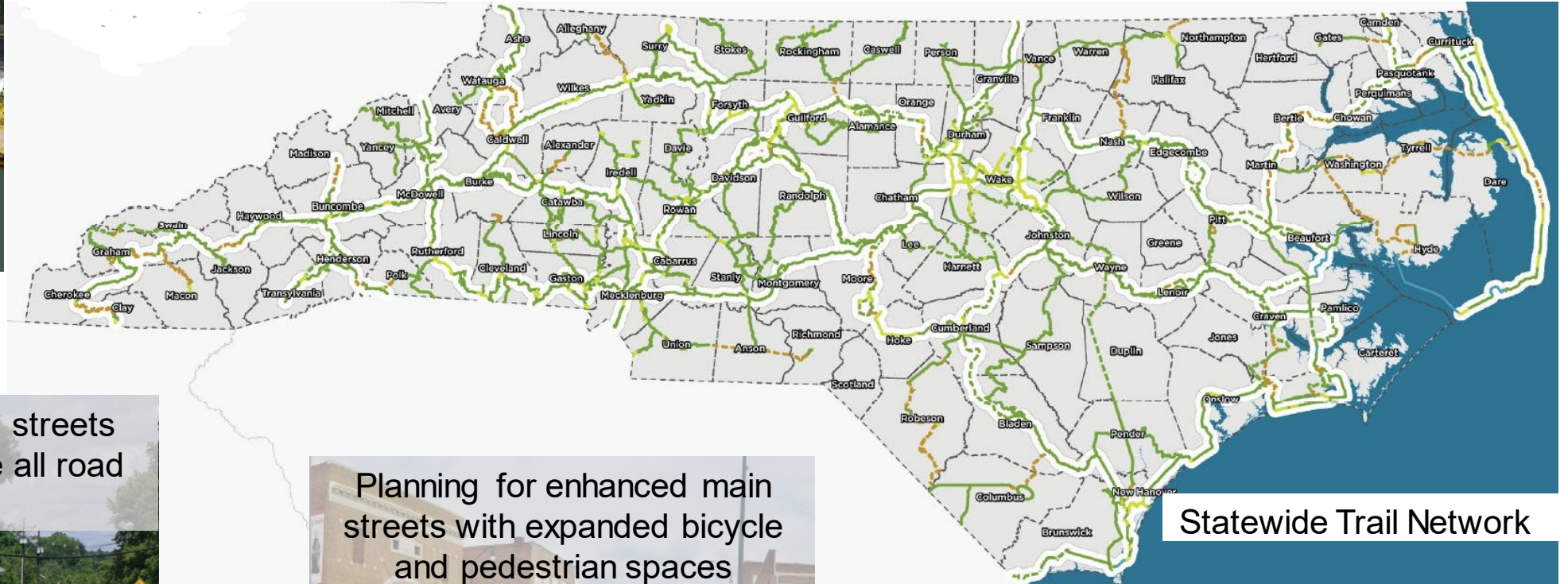
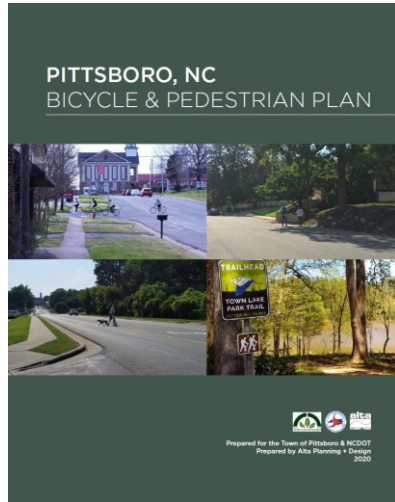


Planning for a Connected, Autonomous, Multimodal Transportation Future

The Connected Autonomous Shuttle Supporting Innovation (CASSI) was deployed at the Wright Brothers National Memorial in 2021 – the first autonomous shuttle deployment at a National Parks site.



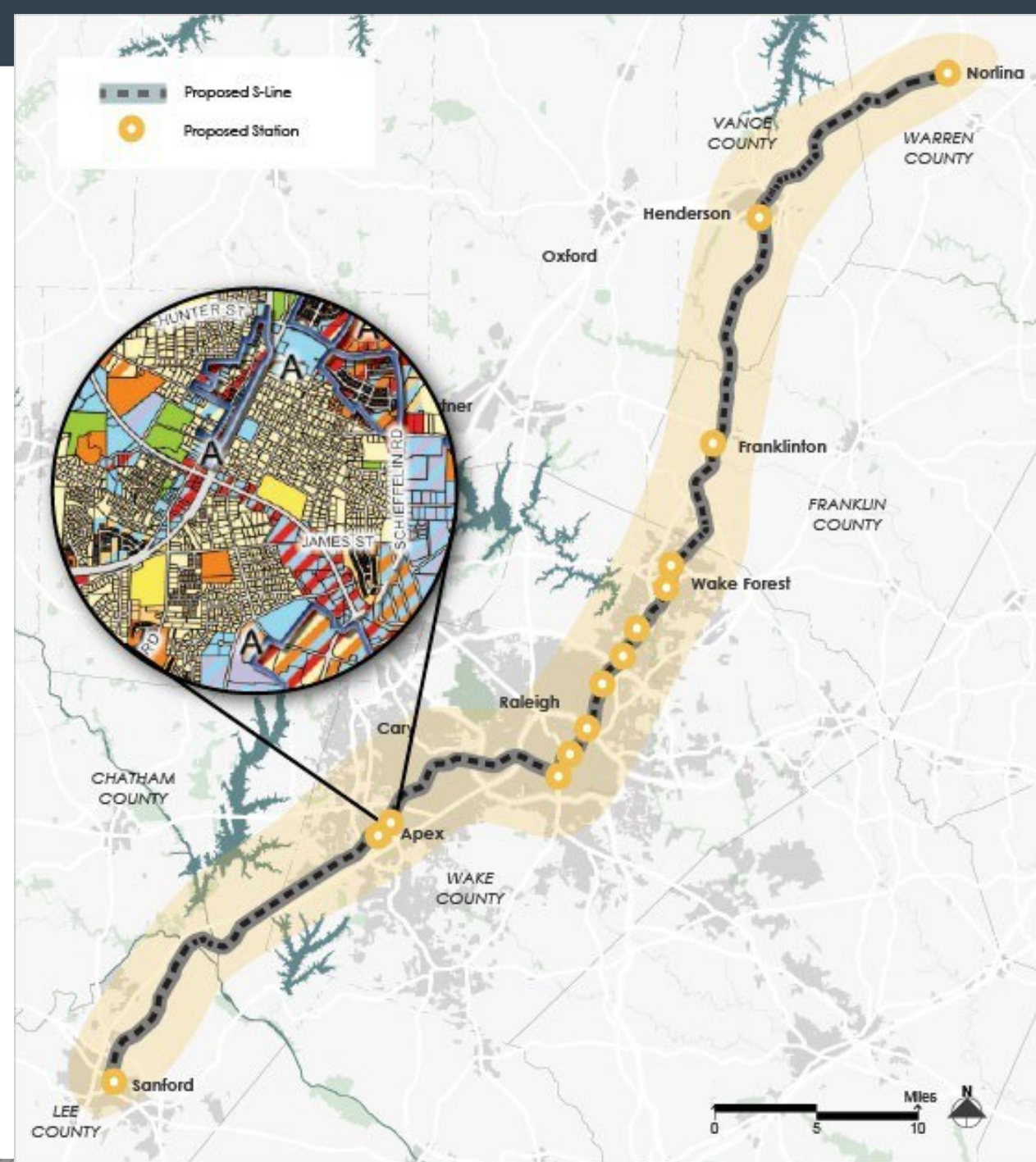
Accommodating All Modes and Providing Mobility Choices



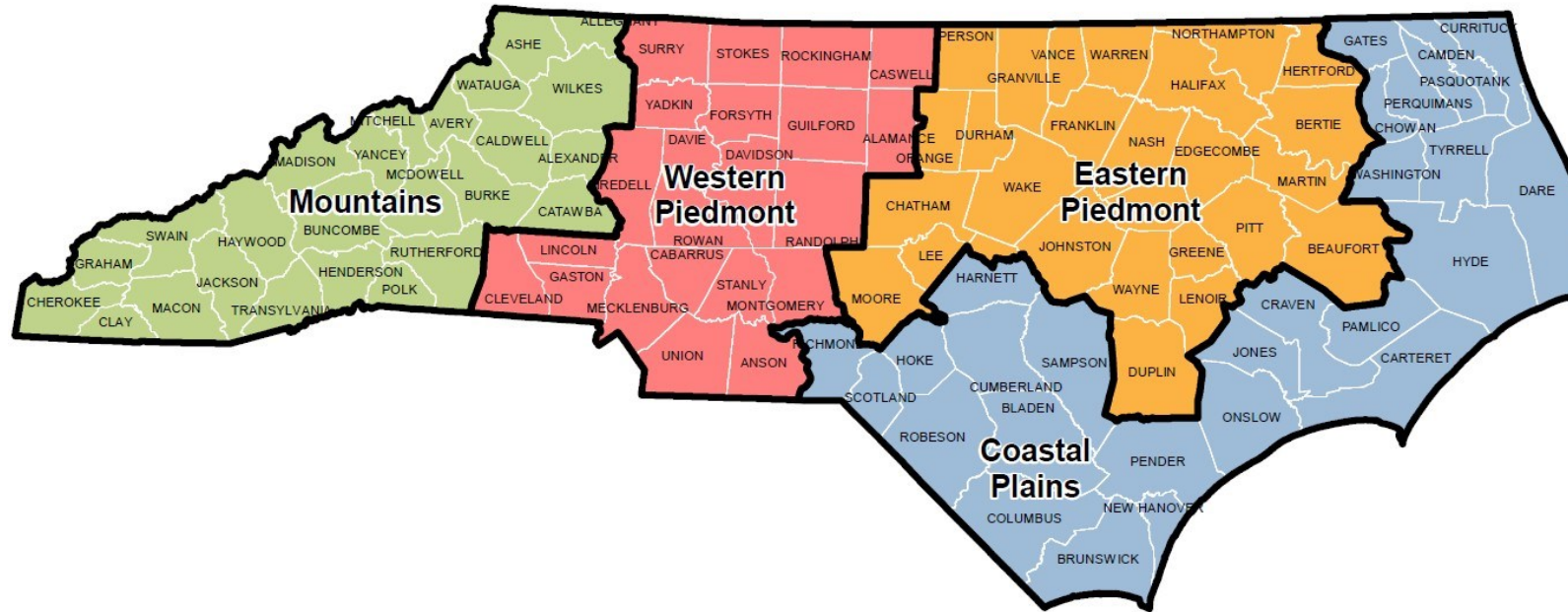
Linking Land Use and Transportation Planning

S-Line Transit Oriented Development

- **Corridor-wide Conversations**
 - Corridor/service vision and goals
 - Station locations
 - Funding / financing
 - Transit operations
- **Local Implementation**
 - Land use plans
 - Zoning
 - Regulatory Policies
 - Infrastructure investments



Building Partnerships



Eastern Piedmont

Section	Contact	Office Number	Email Address
Finance	Cassandra Wilson	919-707-4671	cdwilson@ncdot.gov
Grants Administration	Tony Sumter	919-707-4689	asumter@ncdot.gov
Planning	Bryan Lopez	919-707-2606	balopez@ncdot.gov
Safety, Education and Compliance	Eartle McNeill	919-707-4686	elmcneill1@ncdot.gov

Coastal Plains

Section	Contact	Office Number	Email Address
Finance	Katie Dunn	919-707-4670	kedunn@ncdot.gov
Grants Administration	Alexius Farris	919-707-4698	aafarris@ncdot.gov
Planning	Bryan Lopez	919-707-2606	balopez@ncdot.gov
Safety, Education and Compliance	Eartle McNeill	919-707-4686	elmcneill1@ncdot.gov

Mountains

Section	Contact	Office Number	Email Address
Finance	Rose Hafford	919-707-2600	rlhafford@ncdot.gov
Grants Administration	Bernard Clark	919-707-4678	bbclark2@ncdot.gov
Planning	Bryan Lopez	919-707-2606	balopez@ncdot.gov
Safety, Education and Compliance	Ross Dragon	919-707-4681	radragon@ncdot.gov

Western Piedmont

Section	Contact	Office Number	Email Address
Finance	Inger Bautista	919-707-4683	imbautista@ncdot.gov
Grants Administration	Kenetta Spence	919-707-4673	kmmclean@ncdot.gov
Planning	Bryan Lopez	919-707-2606	balopez@ncdot.gov
Safety, Education and Compliance	Ross Dragon	919-707-4681	radragon@ncdot.gov

Funding

- Expand incorporation of multimodal components in existing highway projects when needs are identified.
- Improve effectiveness of state and federal transit and active transportation funding by better aligning investments with needs.
- Enhance and streamline underutilized or underperforming transit and active transportation programs.
- Be prepared for an increase in funding levels.
- Proactively prepare for discretionary funding opportunities.

Transit Grants in Infrastructure Bill

FTA Discretionary Grants	FY 2021 (Actual)	FY 2022 (Proposed in IJA)
Transit Oriented Development (Discretionary Pilot)	\$ 10,000,000	\$ 13,157,184
Passenger Ferry Boat Program	\$ 30,000,000	\$ 30,000,000
Pilot Program for Enhanced Mobility	\$ 3,500,000	\$ 4,605,014
Public Transportation on Indian Reservations Competitive	\$ 5,000,000	\$ 8,752,896
Transit Research	\$ 28,000,000	\$ 36,840,115
Technical Assistance and Workforce Development	\$ 9,000,000	\$ 11,841,465
Bus Testing Facilities	\$ 3,000,000	\$ 5,000,000
National Transit Database	\$ 4,000,000	\$ 5,262,874
Bus Facilities Comp. and Low-No Comp.	\$ 344,044,179	\$ 447,257,433
Railcar Replacement Program Competitive Grants	-	\$ 300,000,000
Capital Investment Grants (estimated)	\$ 2,000,000,000	\$ 2,500,000,000
Transit Infrastructure Grants (estimated)	\$ 516,000,000	\$ 580,000,000
Total	\$ 2,952,544,179	\$ 3,942,716,981

Discretionary Grants in Infrastructure Bill

- INFRA - \$8 Billion over 5 years proposed in IIJA
- RAISE - \$7.5 Billion over 5 years proposed
- New programs include:
 - Safe Streets and Roads for All – \$5 Billion
 - Strengthening Mobility and Revolutionizing Transportation Grant program – \$500 Million
 - National Infrastructure Project Assistance – \$5 Billion
 - Bridge Investment Program – \$9.2 Billion
 - Charging & Alternative Fueling Grants – \$5 Billion



NORTH CAROLINA

Department of Transportation



Ryan Brumfield, Director

Integrated Mobility Division

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Connect2050

Metropolitan Transportation Plan

1. Foundations

- Joint MPO Transportation Policy Priorities
- Community Engagement Results

2. Key Drivers

- Opportunity Places Land Use
- All Together Fiscal Constraint

3. Shared Regional Investments

- Transit & Rail
- Safe, Active, Healthy Mobility
- Complete Corridors

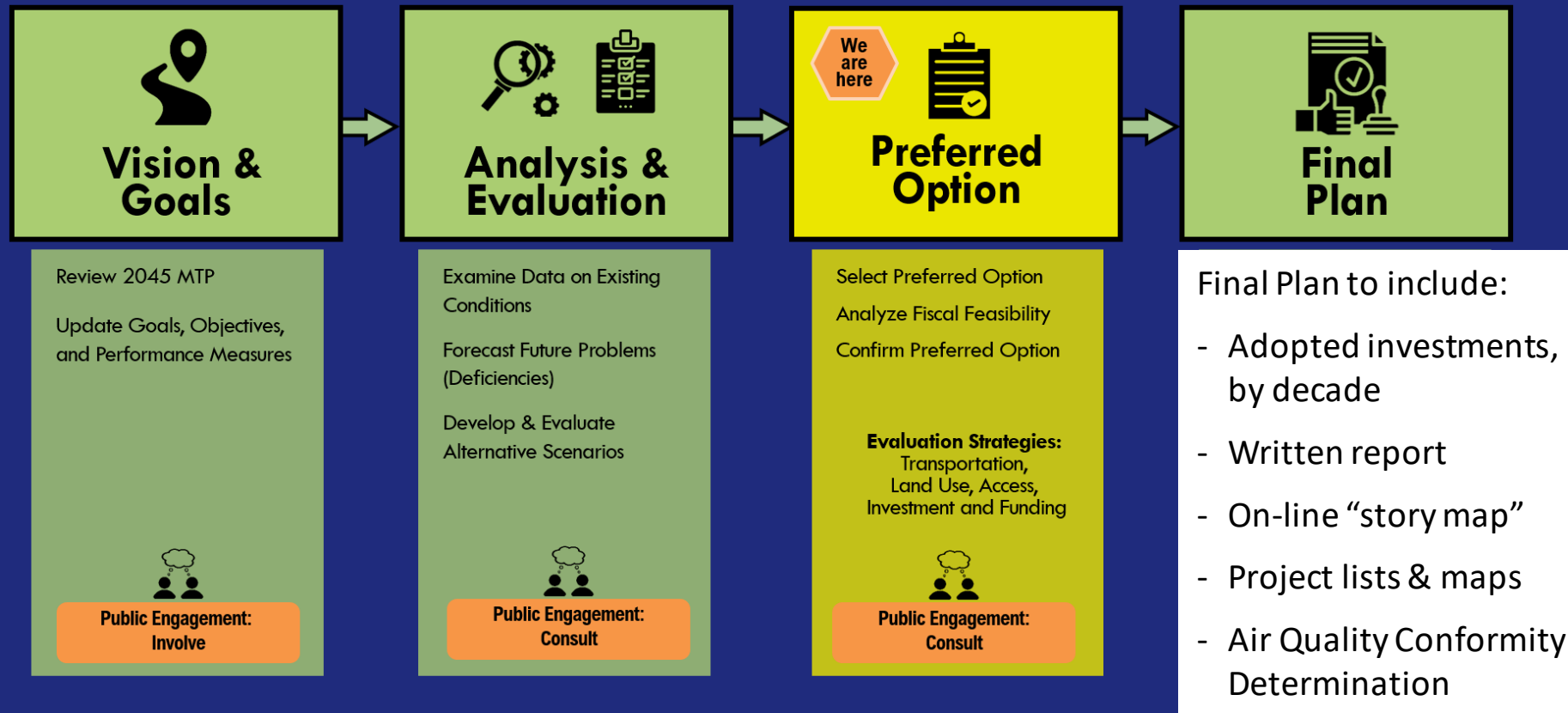
4. Discussion: Exec. Board/Board Members



Connect2050 Metropolitan Transportation Plan

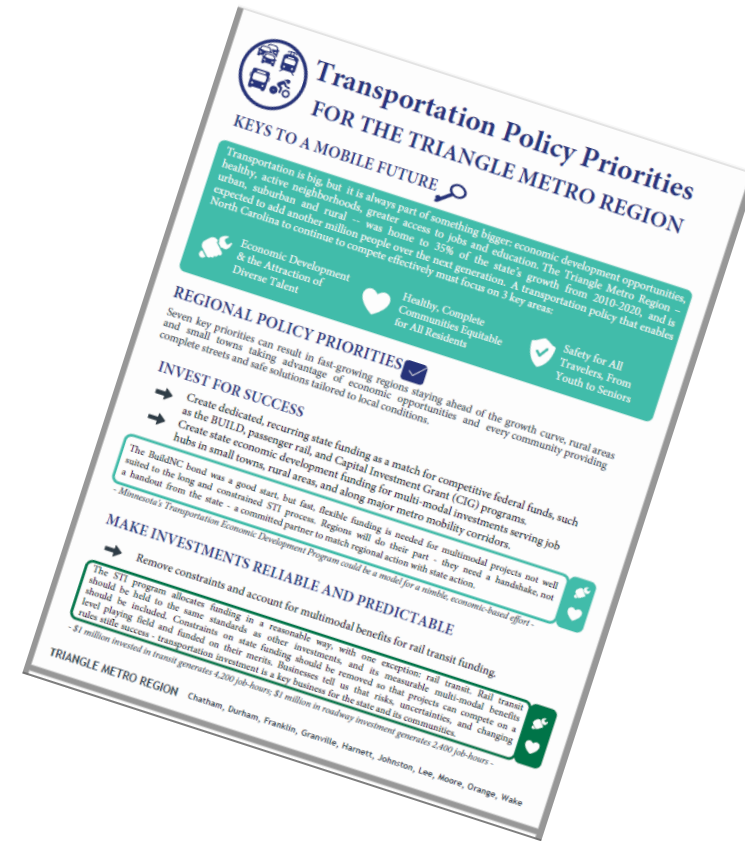
MTP Update Process

The overall process to develop the MTP typically takes 18 months, or more. CAMPO updates the MTP on a 4-5 year cycle and is currently developing the 2050 MTP.



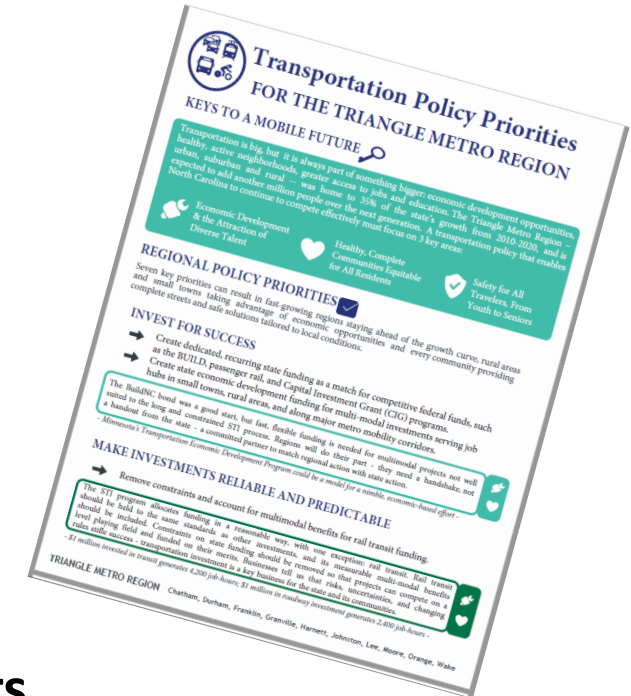
Joint MPO Transportation Policy Priorities

Helpful to have for reference:
Policy Priorities Document
(updated after December 2020 meeting)



Triangle Regional Transportation Policy Priorities

- **Invest for success**
- **Make investments reliable & predictable**
- **Enable more cost-effective critical corridor investments**
- **Remove funding barriers for small towns & rural areas in divisions with large MPOs**
- **Make NC a leader in active transportation investments**
- **Strengthen support for demand-management and technology**
- **Recognize statewide projects in all modes**



MTP Preferred Scenario:

- MPO “fair share” of *NC First Commission* recommended funding – applied more flexibly than STI
- Added local funding equivalent to amount from existing ½ cent sales tax in Wake, Durham & Orange; ¼ cent equivalent in Johnston, Franklin, Granville & Harnett – local discretion on use



Invest for Success



A Triangle Metro Region Transportation Priority

Create dedicated, recurrent state transportation funding as a match for competitive federal funds, together with state economic development funding for key multi-modal investments serving job hubs.

The BuildNC bond was a good start, but fast, flexible funding is needed for multi-modal projects not well suited to the long and constrained STI process. Regions will do their part -- they need a handshake, not a handout from the state -- a committed state partner to match regional action with state action.



- State funding for shovel-ready and shovel-worthy projects may drive any federal stimulus funding decisions -

Opportunity comes to those who are prepared for it. North Carolina needs special transportation funds that move at the speed of business and are fast and flexible enough to dovetail with changing federal transportation funding opportunities and business expansion decisions:

- NC has a history as a "donor" state when it comes to competitive grants, especially for major transit capital investments
- Recent major economic development location decisions, such as for the Amazon HQ2, have emphasized the importance of investing in quality transit to attract jobs

Dedicated State Funding to Match Competitive Federal Funds

What success looks like: A ready-to-go pool of state matching funds that local and state applicants for competitive federal grants can count on to increase their chances for success.

Recent Success

North Carolina awarded \$47.5 million CRISI grant to purchase freight line for future passenger service
The 10-mile line is called the "relaying link" for future high-performance passenger rail service between Raleigh, R.C., and Richmond, Va.

Author - Michele Menden
Sep 24, 2021



Key Policy Considerations

- Understanding federal scoring systems and tailoring projects for maximum success
- Ensuring sufficient levels of funding to provide matches, while being able to pivot funding if applicants are not successful
- Nurturing relationships with federal agencies and local partners to ensure our ability to deliver projects on time & on budget

Project Types that Might Benefit

- BRT and passenger rail projects through the Federal Capital Investment Grants (CIG) program
- Roadway, transit and bike-ped projects seeking BUILD funding
- Projects eligible for any infrastructure stimulus legislation that may occur



MTP Preferred Scenario:

- Triangle Bikeway Project in Shared Regional Investments
- Opportunity Places land use with more mixed-use, walkable areas
- Increased funding for active transportation investments due to NC First Commission funding and added local revenue source



Make NC a Leader in Active Transportation Investments



A Triangle Metro Region Transportation Priority

Surpass peer states in funding economically beneficial and safety-focused bicycle and pedestrian projects and programs

Whether it's a critical link in NCDOT's Great Trails State Plan, an important sidewalk connection to make travel safer, or a Main Street bike and pedestrian project to serve businesses, state funding provides crucial leverage for federal funds and local contributions.



- 16% of crash fatalities are either pedestrians or cyclists -

North Carolina and the Triangle Metro Region should prioritize active transportation investments that support healthy and safe communities. Primary focus areas are:

- Improved implementation of Complete Streets projects
- Active Routes to School, Parks, and Transit approaches that have demonstrated health, equity, and academic performance benefits.

Complete Streets

What success looks like: NCDOT Complete Streets policy implementation is based on the land use and travel characteristics of corridors, along with the needs of users, not on the type of facility that is built or the community it is in. NCDOT, MPOs, RPOs, and local communities seamlessly blend federal, state and local funds to achieve results.

A Successful Complete Street



Key State Actions

- Restore state funding for independent active transportation projects to put all modes on a level playing field.
- Make facility maintenance easier.
- Lower the local match requirements to incentivize more investments.
- Leverage all funding programs, including safety, for active transportation.
- Develop best practices for tracking success in active transportation.

Triangle Projects That Could Benefit

- NC 98 Corridor
- Triangle Bikeway
- NCDOT Great Trails State routes



MTP Preferred Scenario:

- Sustained and growing Regional Transportation Choices Program (“TDM”)
- Regional Intelligent Transportation Systems (ITS) program involving MPOs, NCDOT & city staff
- Transit Signal Priority along key transit routes
- Continued traffic signal integration



Strengthen Support for Demand Management & Technology



A Triangle Metro Region Transportation Priority

Stabilize and grow state investment in Transportation Demand Management (TDM) to match local and regional commitments. Implement the Regional Technology (ITS) Plan for roadways and transit.

The most cost-effective dollar spent is on efficiently managing the demand for the supply of roads we already have. Working with employers on ways to offer workers alternatives to peak-hour, drive-alone commuting and deploying technologies to maximize the roadway supply are key elements of the smart city movement.



- The Triangle TDM program has reduced vehicle miles traveled by over 300 million miles over the past 5 years -

The Triangle Metro Region is already a leader in the state in deploying emerging technologies and demand management solutions that optimize roadway and transit capital projects. Two key focus areas should be:

- Taking the already successful Regional Transportation Demand Management Partnership to the next level.
- A three-pronged approach to Smart Cities Technology Applications that optimizes how we travel and paves the way for automated, connected vehicles.

Regional Transportation Demand Management Partnership

What success looks like: NCDOT, the Triangle Metro's MPOs and key partners collaborate to recruit, recognize and reward employers and communities that implement different tiers of Transportation Demand Management practices.

Employer Success



Key Ingredients

- A regional collaboration between NCDOT, both MPOs and Triangle J COG with 14 competitively-selected service providers.
- Employer-focused with emphasis on anchor institutions, city centers and the RTP
- Coordinated outreach, including virtual webinars on telecommuting during COVID.

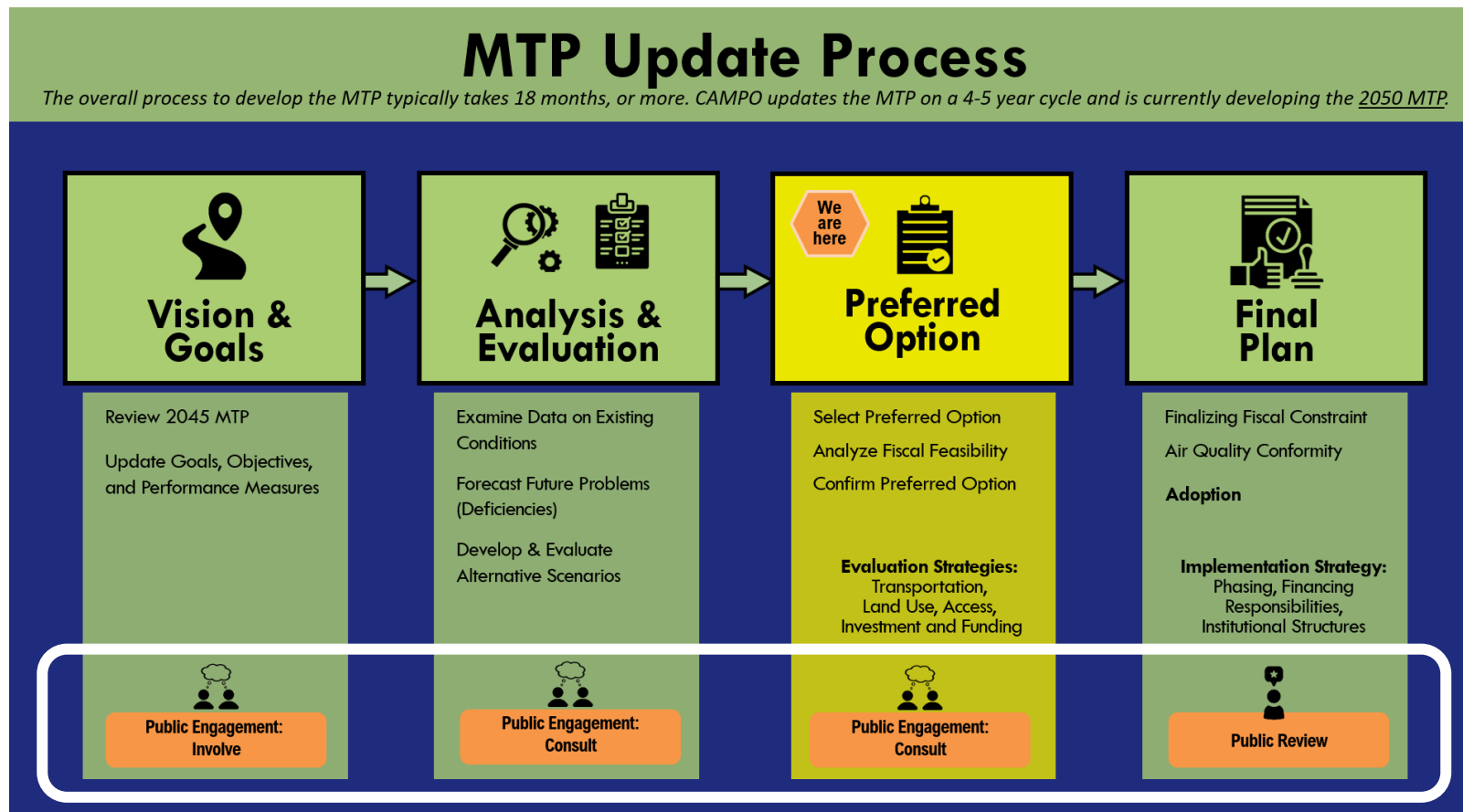
Success Metrics (FY19)

- 6.5 million vehicle trips avoided
- 70 million commute miles reduced
- 2.9 million gallons of gas saved
- 58 million pounds of carbon dioxide release prevented
- 32 designated Best Workplaces for Commuters



Community Engagement Results to Date

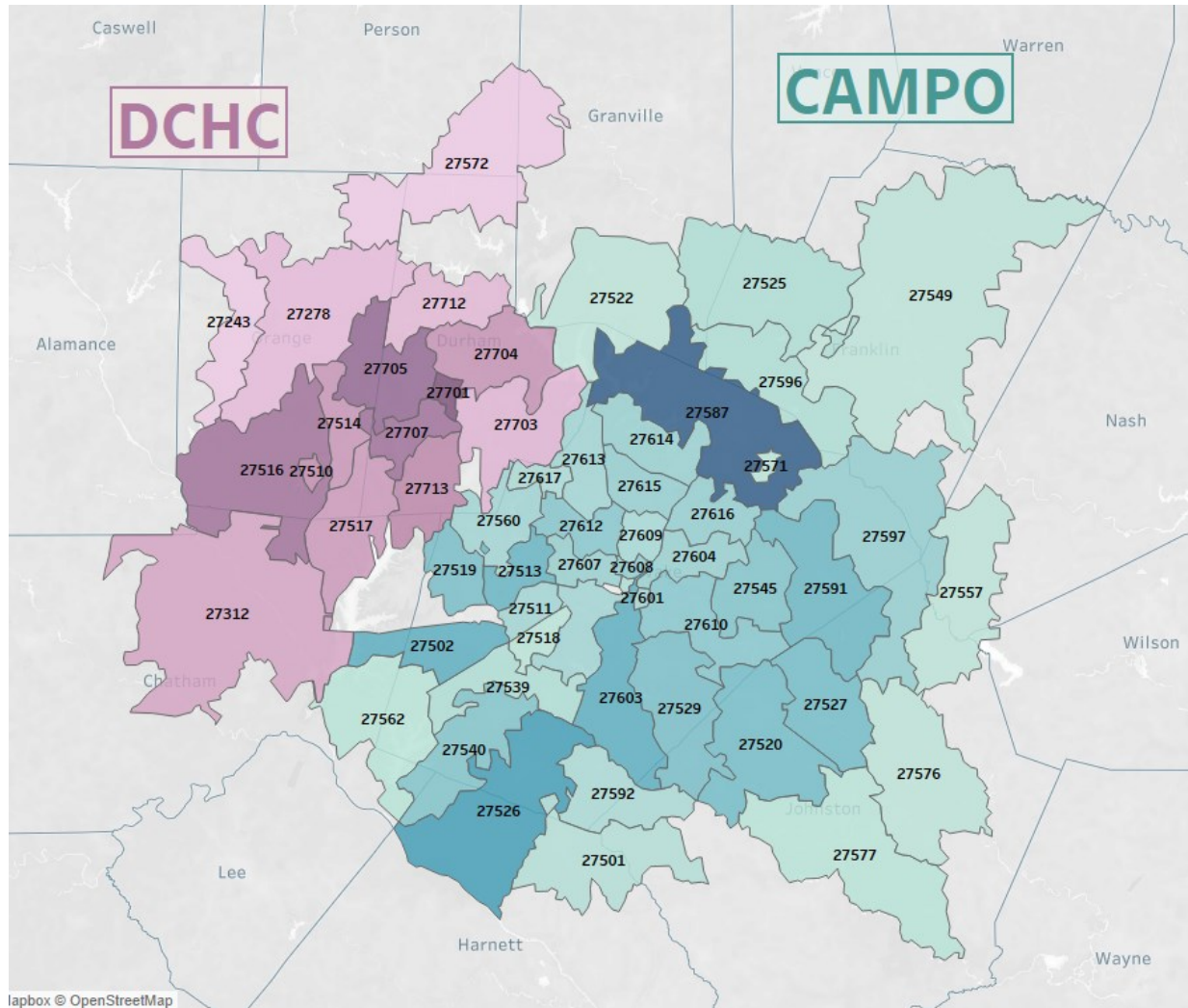
Multiple Touchpoints throughout MTP Development



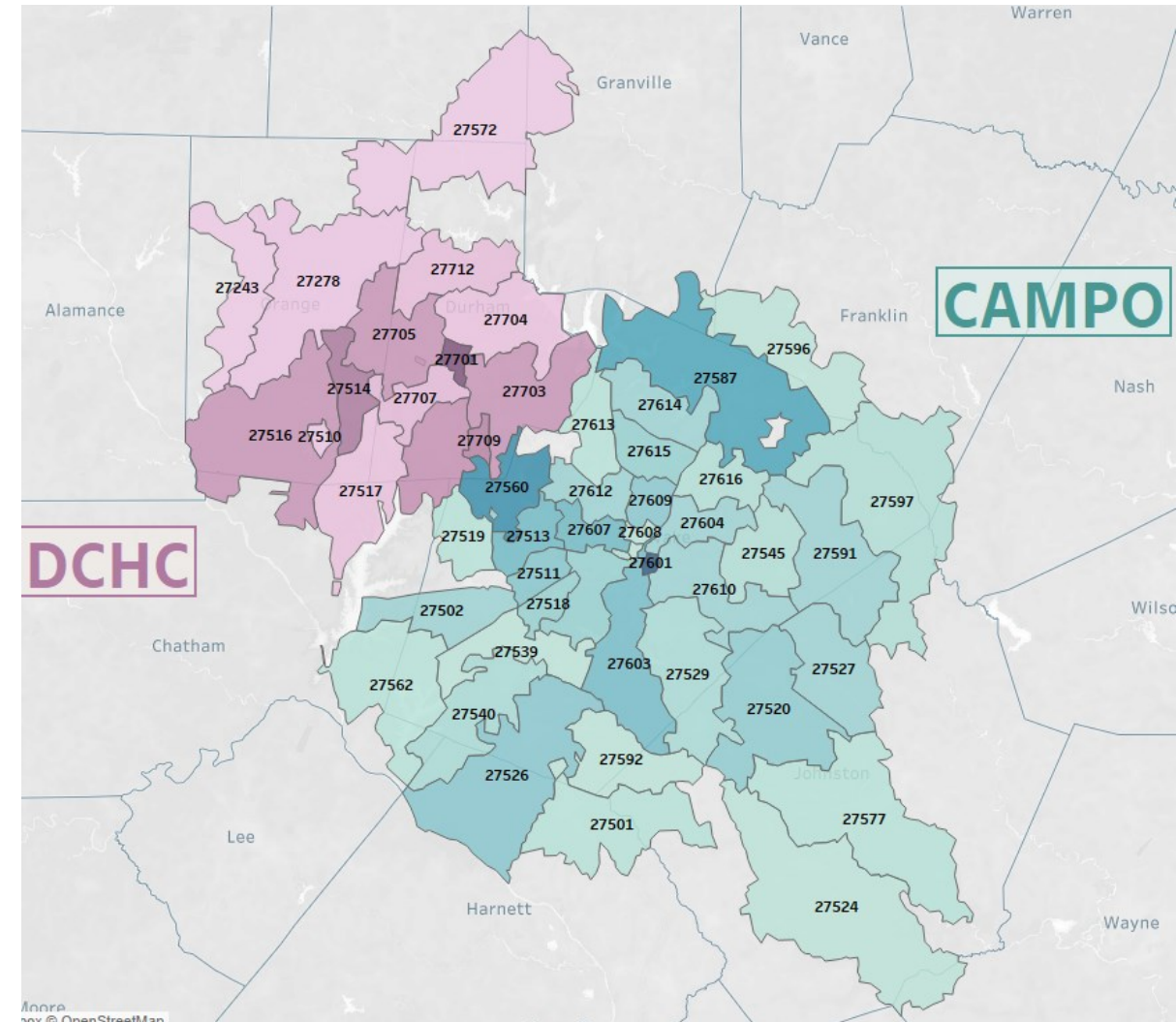
Scenarios Survey Community Engagement Results

August 2021

Response rates by HOME Zip Code

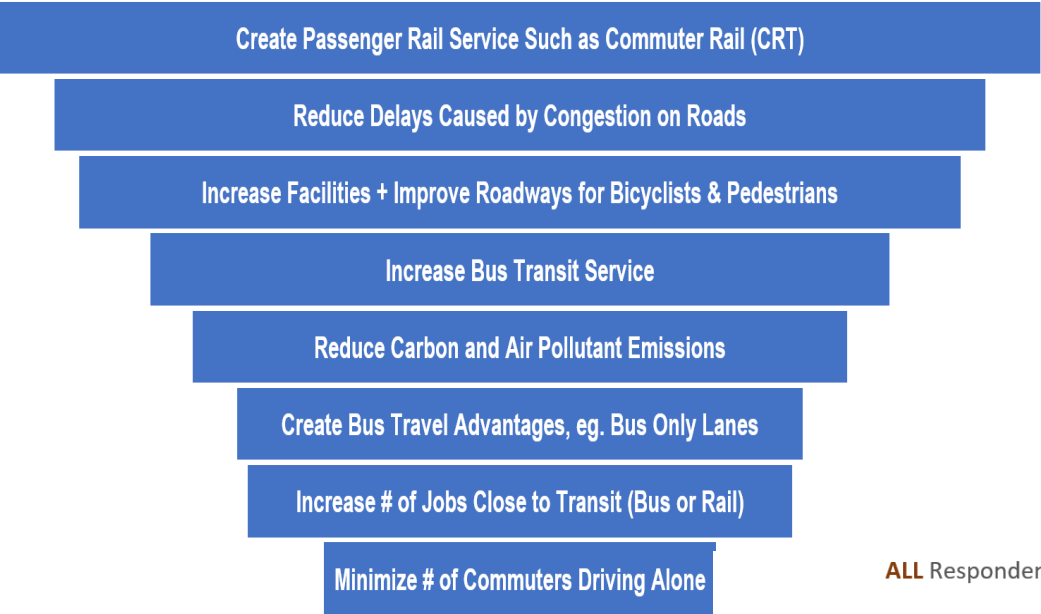


Response rates by WORK Zip Code

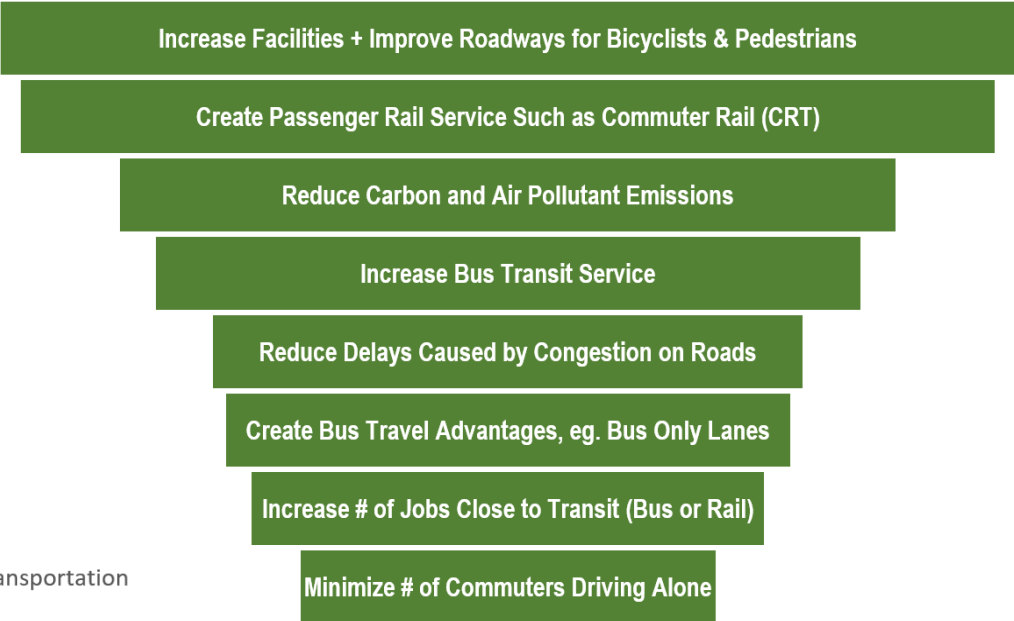


Scenarios Community Engagement Results

CAMPO Respondents - Ranking of Measures to Improve Transportation in the Region
(Cumulative Scores) n=381



DCHC MPO Respondents - Ranking of Measures to Improve Transportation
(Cumulative Scores) n=235

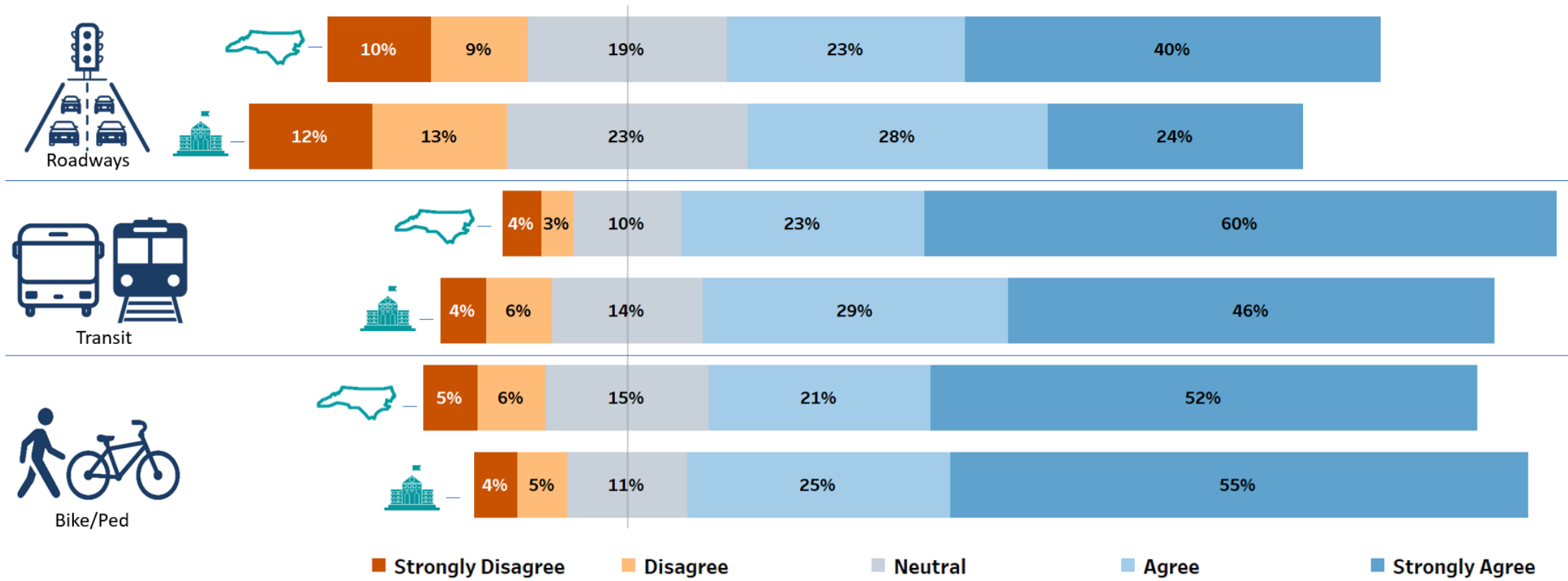


ALL Respondents - Ranking of Measures to Improve Transportation
(Cumulative Scores) n=613

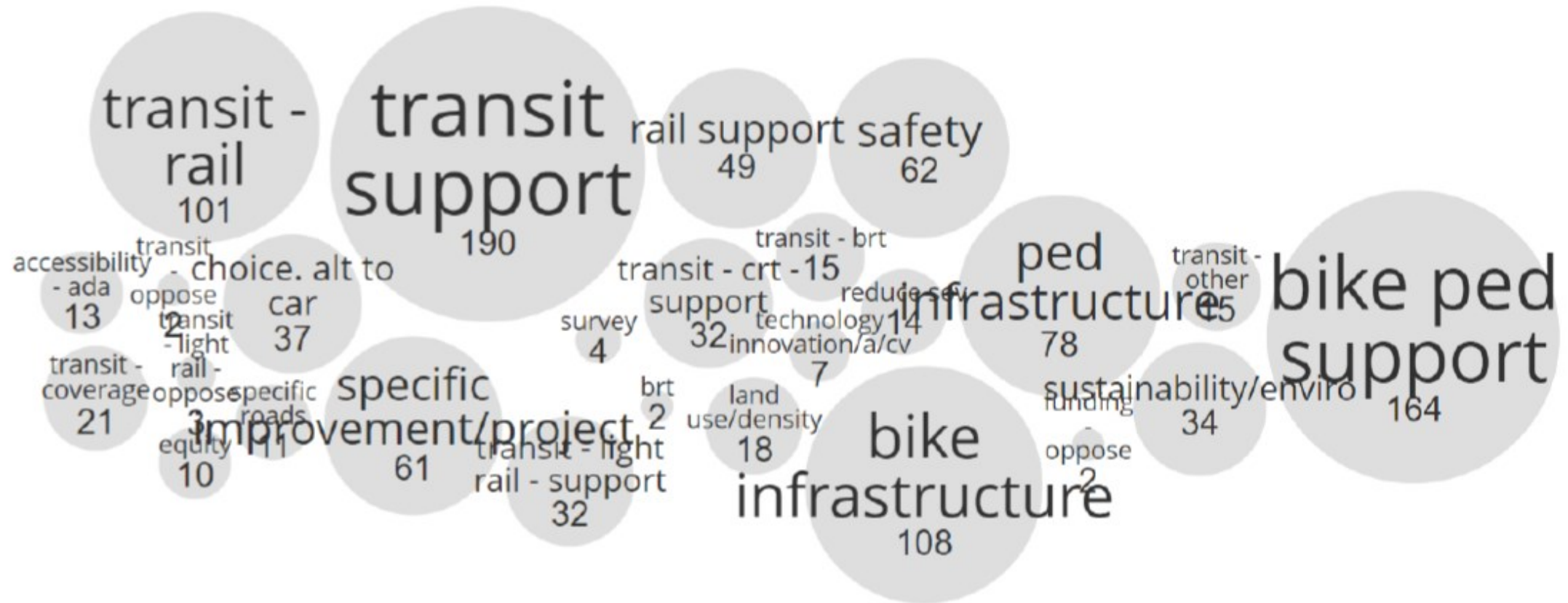


Scenarios Survey - Funding

Additional funding should be provided at the (state OR local) level for ____ (mode).
ALL Respondents n=763



Scenarios Survey – Comments Received



Other Community Engagement - Region

Commuter Rail Project – Phase 1 (late 2020)

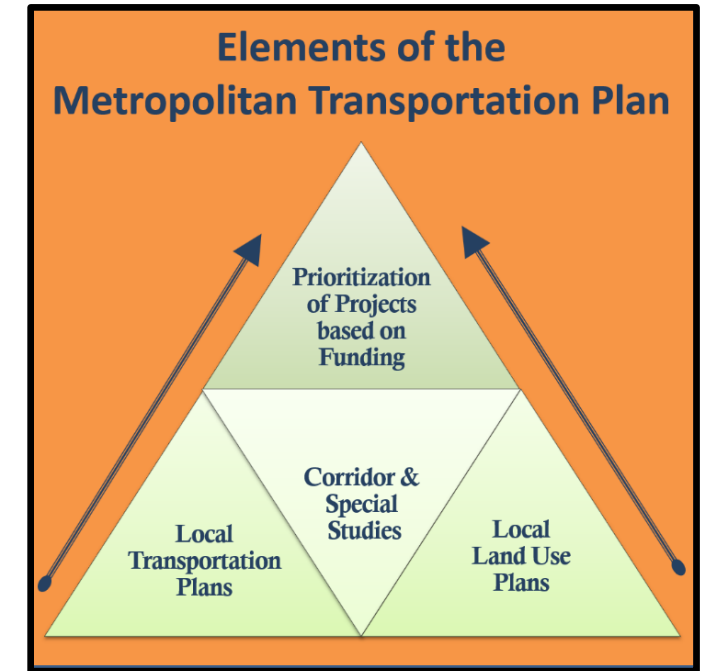
Major Takeaways

Benefits of the CRT Project

- Reducing congestion
- Environmental benefits
- Decreasing commute times
- Bringing the Triangle up to modern metropolitan standards
- Sense of connectivity throughout the region

Concerns

- Project cost and funding allocation
- Would it be effective?
- Would it serve the community equitably?
 - Serves only commuters
 - Doesn't serve those most in need (not equitable)
 - Some geographic areas left out



Others: Recent or Ongoing Area Transit Plan Updates

Wake Transit Plan Update (Approved 2021)

RANKING OF SERVICE & INFRASTRUCTURE PRIORITIES

STAKEHOLDER RESULTS (Sept. 2020)

Rank	Service Priority
1	Frequency
2 (Tie)	Coverage
2 (Tie)	Span
4	Regional Service
5	Local Service

Rank	Infrastructure Priority
1	Speed & Reliability
2	Facilities
3 (Tie)	Connecting Infrastructure
3 (Tie)	Technology
5	Vehicles

PUBLIC SURVEY RESULTS (Aug. 2020)

Rank	Service Priority
1	Coverage
2	Frequency
3	Regional Service
4	Local Service
5	Span

Rank	Infrastructure Priority
1	Speed & Reliability
2	Connecting Infrastructure
3	Technology
4	Facilities
5	Vehicles

RANKING OF MODAL PRIORITIES

STAKEHOLDER RESULTS (Sept. 2020)

Rank	Modal Priority
1	Bus Rapid Transit
2	Commuter Rail
3	Coverage Bus Services
4	High-Frequency Bus Services





2050 Metropolitan Transportation Plan

Key Drivers

1. Opportunity Places Land Use
2. All Together Fiscal Constraint



Connect 2050 Scenario Framework

							
			Mobility Investment Foundation				
			Existing & Committed	Trend	Mobility Corridors	Complete Communities*	Comprehensive Transport Plan
	Development Foundation	Existing or Underway	basis for all scenarios				
		Community Plans	Deficiency & Needs Scenario	Plans & Trends Scenario			
		Opportunity Places (Key Hubs; REINVEST Neighborhoods)			Shared Leadership Scenario	All Together Scenario	
		Build-Out					If unlimited \$ & capacity growth

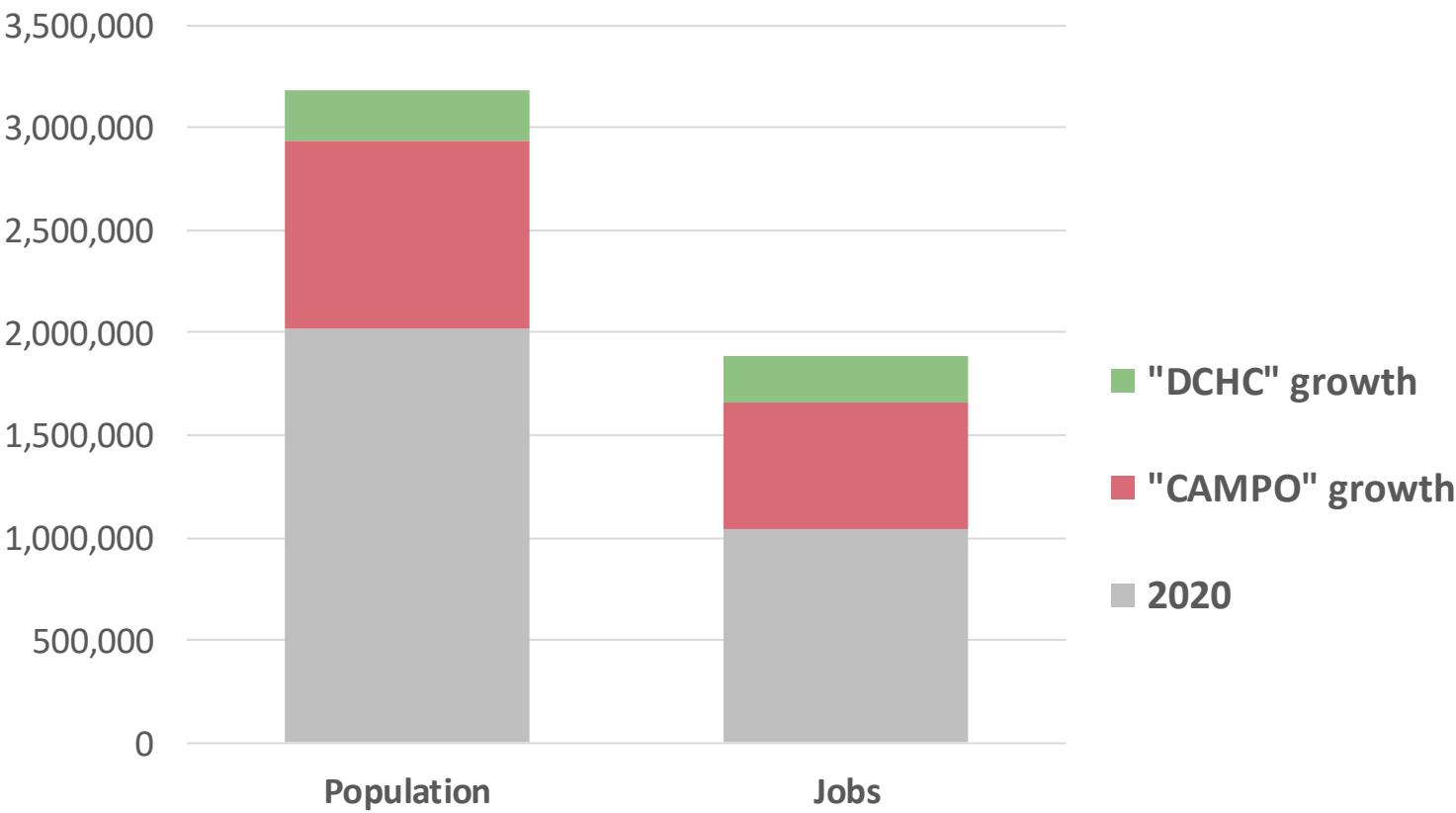
* More focused investment on Complete and Safe Streets, Active Transport, and Transit

- ❖ Draft Preferred Scenario based on Opportunity Places land use, All Together revenues, and modified Compete Communities mobility investments.



2020-2050 Growth Guide Totals

(modeled area; larger than MPO boundaries)



Within “modeled area:”

- 2020-50 added population: 1,160,000
- 2020-50 added jobs: 840,000



Opportunity Places Land Use

- ❖ 4 changes from *Community Plans* land use:
 - ❑ 20% more net growth asserted on Anchor Institution campuses – adding 5,000 jobs combined over and above existing plans
 - ❑ Multi-family affordable housing asserted at publicly controlled sites that meet physical criteria: 10,000 units over 30 years
 - ❑ Increased capacity for growth at 22 activity hubs
 - ❑ Increased capacity for transit-oriented mixed-use development along frequent transit lines



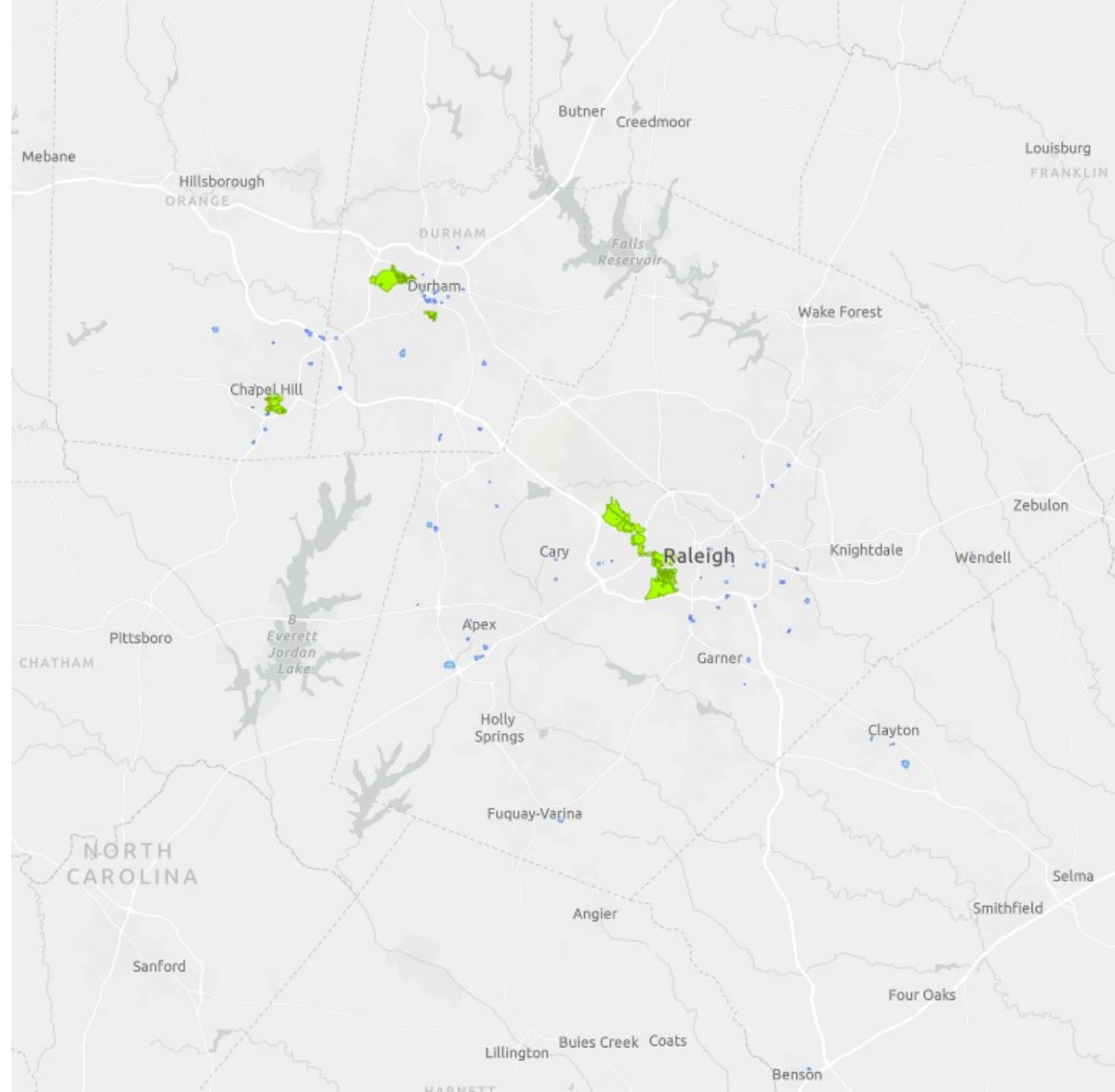
Opportunity Places

❖ Anchor Institutions

- ❑ UNC
 - + 1,940 jobs + 100 units
- ❑ NCSU
 - + 1,150 jobs + 460 units
- ❑ Duke
 - + 1,770 jobs + 270 units
- ❑ NCCU
 - + 220 jobs

❖ Affordable Multi-Family Housing

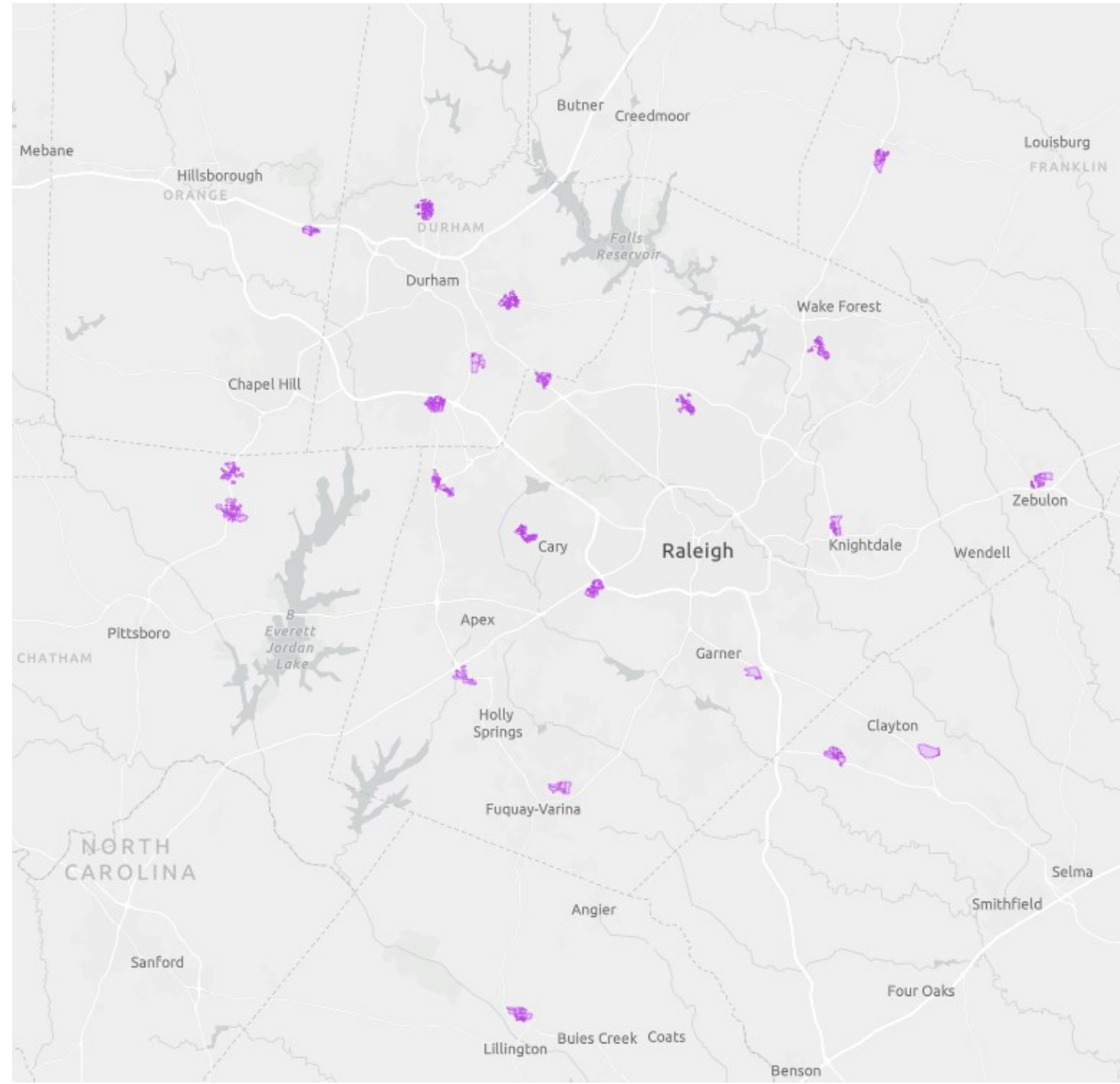
- ❑ Wake + 5,000 units
- ❑ Durham + 3,500 units
- ❑ Orange + 1,000 units
- ❑ Johnston + 500 units



Opportunity Places

❖ Mobility Hubs

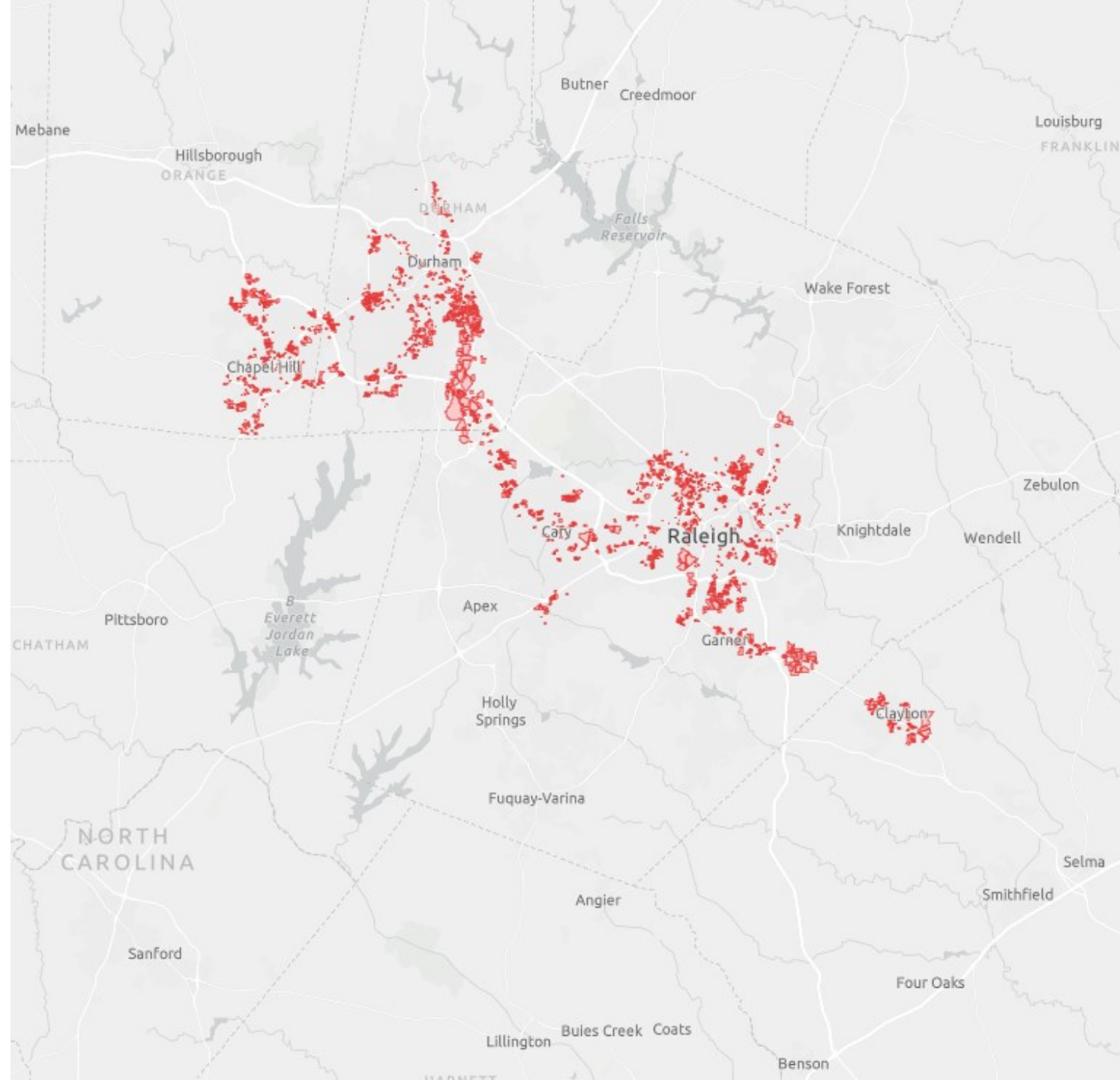
- Based on the initial scenarios, we might expect an added 5% of allocated jobs to “land” in these hubs compared to the Community Plans Scenario



Opportunity Places

❖ Frequent Transit Mixed Use

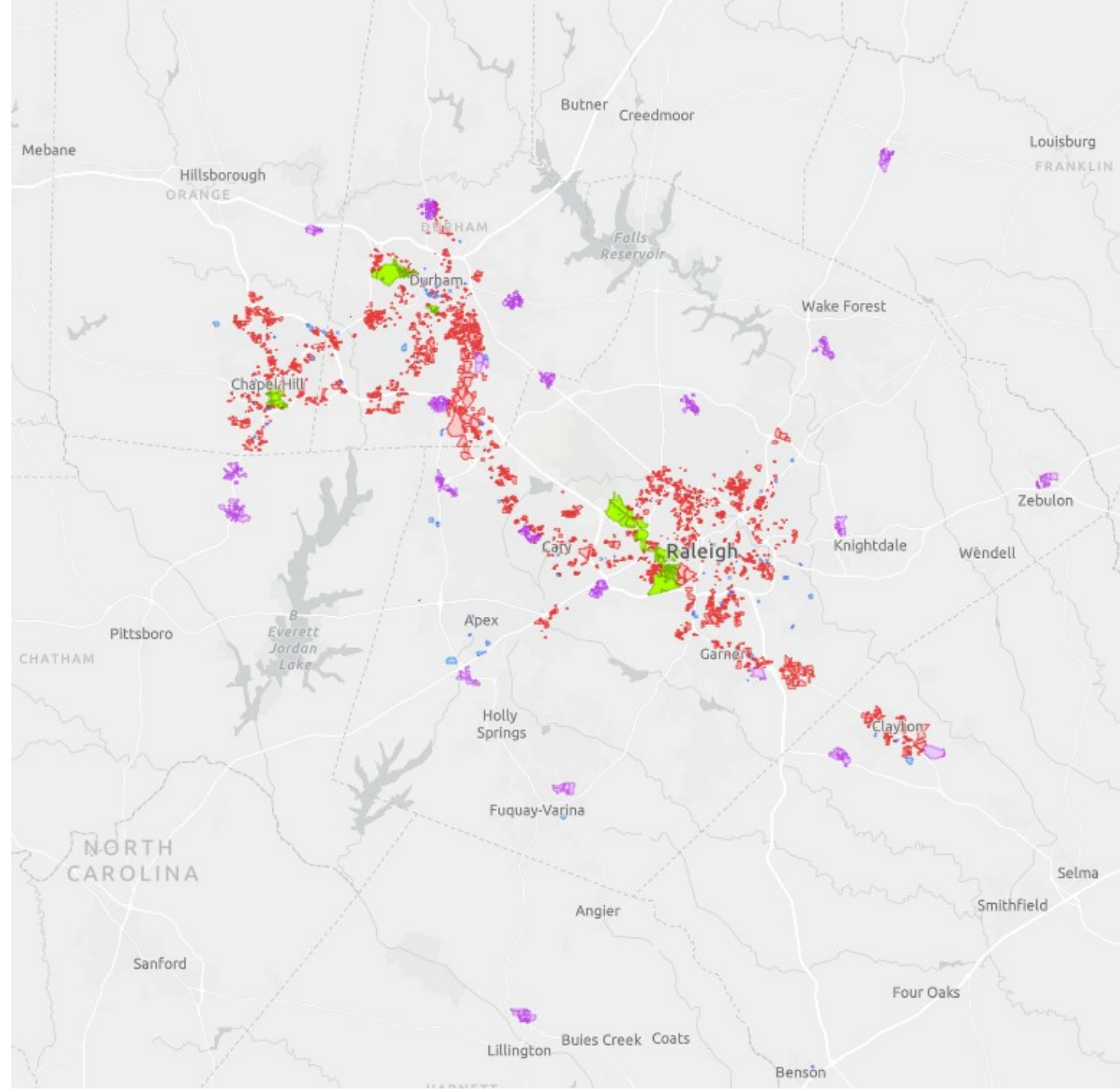
- ❑ Based on the initial scenarios, we might expect roughly 20,000 added jobs and over 30,000 added households to “land” in these TOD sites if we create them, compared to the Community Plans Scenario



Opportunity Places

❖ Composite Map

- ❑ Anchor institutions
- ❑ Affordable multi-family
- ❑ Mobility hubs
- ❑ Frequent transit TOD



2050 Metropolitan Transportation Plan

All Together Investment Revenue

1. “Traditional” Revenues (2021-50)

- ❖ State & federal funds based on current STIP, NC Moves report and STI framework
- ❖ Continuation of county-level transit sales taxes
- ❖ Past pattern for other sources (local bonds, developer projects)

2. NC First Commission Additional State Revenues (2031-50)

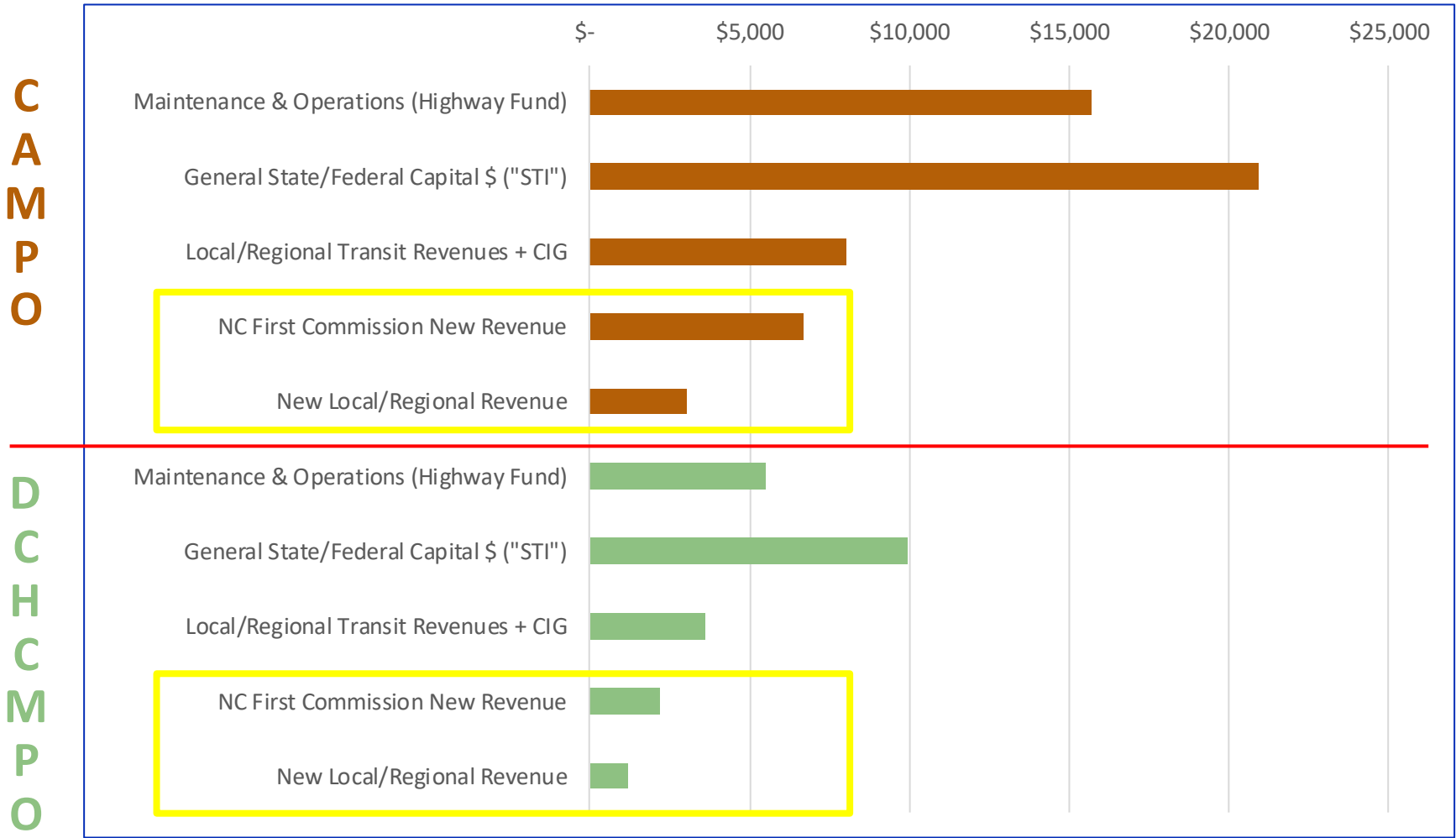
- ❖ MPO “fair shares” of recommended amount

3. Additional Local/Regional Revenues (2031-50)

- ❖ Based on “sales tax equivalent”



Connect2050 Preliminary Financials



1st decade from "TIP" and existing sources; new sources applied in 2nd & 3rd decades



2050 Metropolitan Transportation Plan

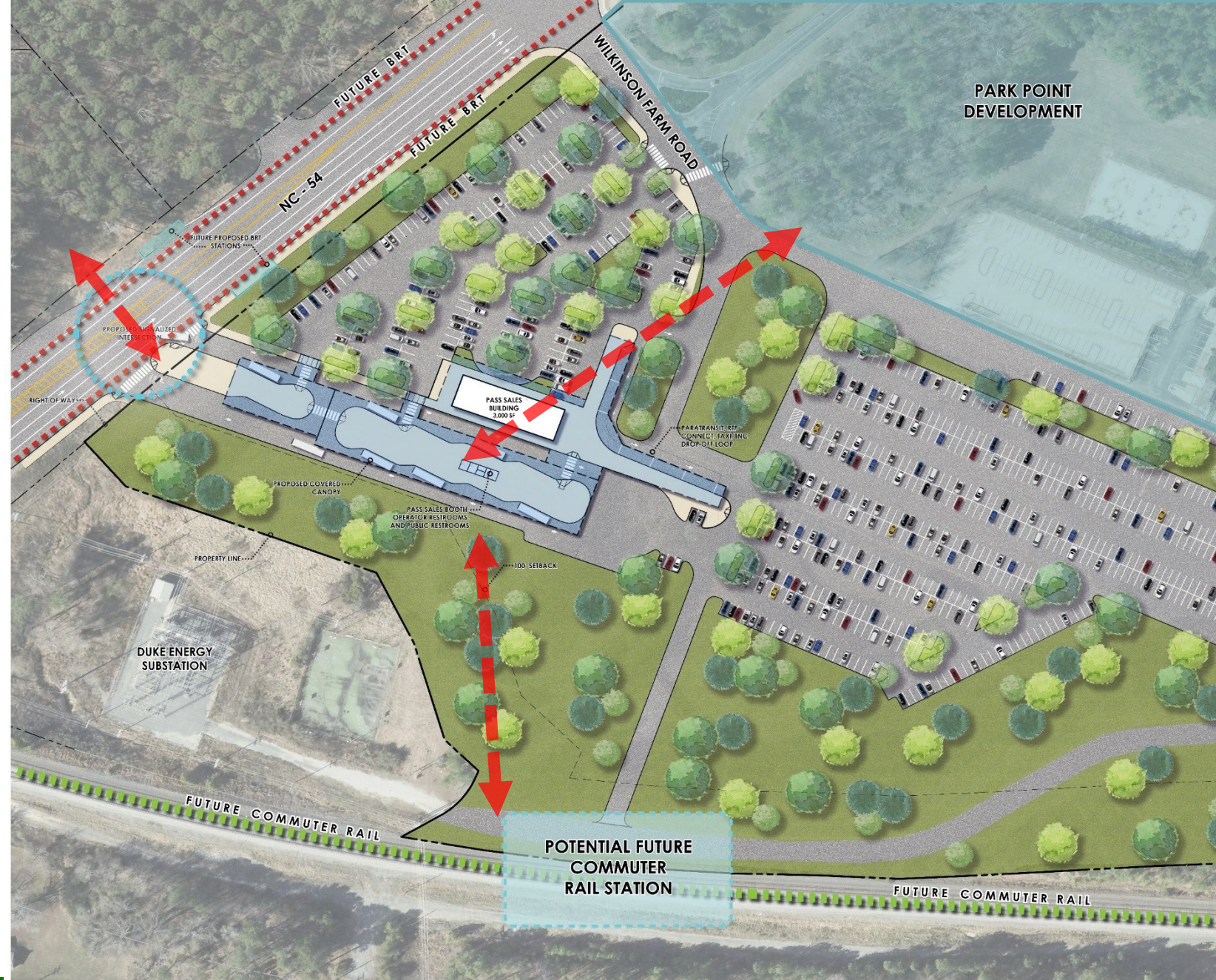
Shared Regional Investments

1. Transit & Rail
2. Healthy, Safe, Resilient Mobility
3. Complete Corridors/Managed Motorways



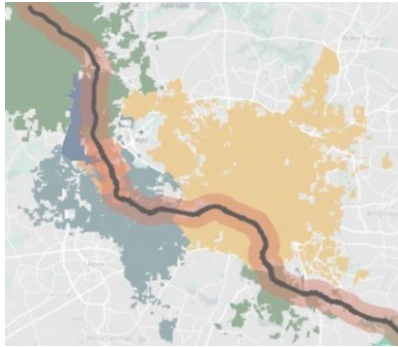
Regional Transit Center

- Near I-40 & Miami Blvd.
- Transit hub for regional services and microtransit
- Connections to planned Bus Rapid Transit, Commuter Rail, and Triangle Bikeway
- Last mile connectivity to RTP destinations
- Improved access to highway network



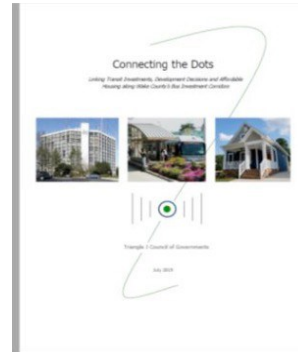
Greater Triangle Commuter Rail

Rail Analysis



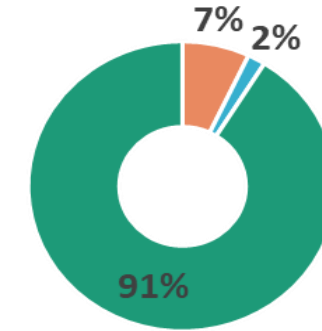
- Stop locations and schedules
- Rail infrastructure: track, bridges, vehicles
- Ridership and rail capacity modeling

Opportunity Analysis



- Affordable housing
- Access to Jobs
- Land Use
- Job Creation Potential

Engagement

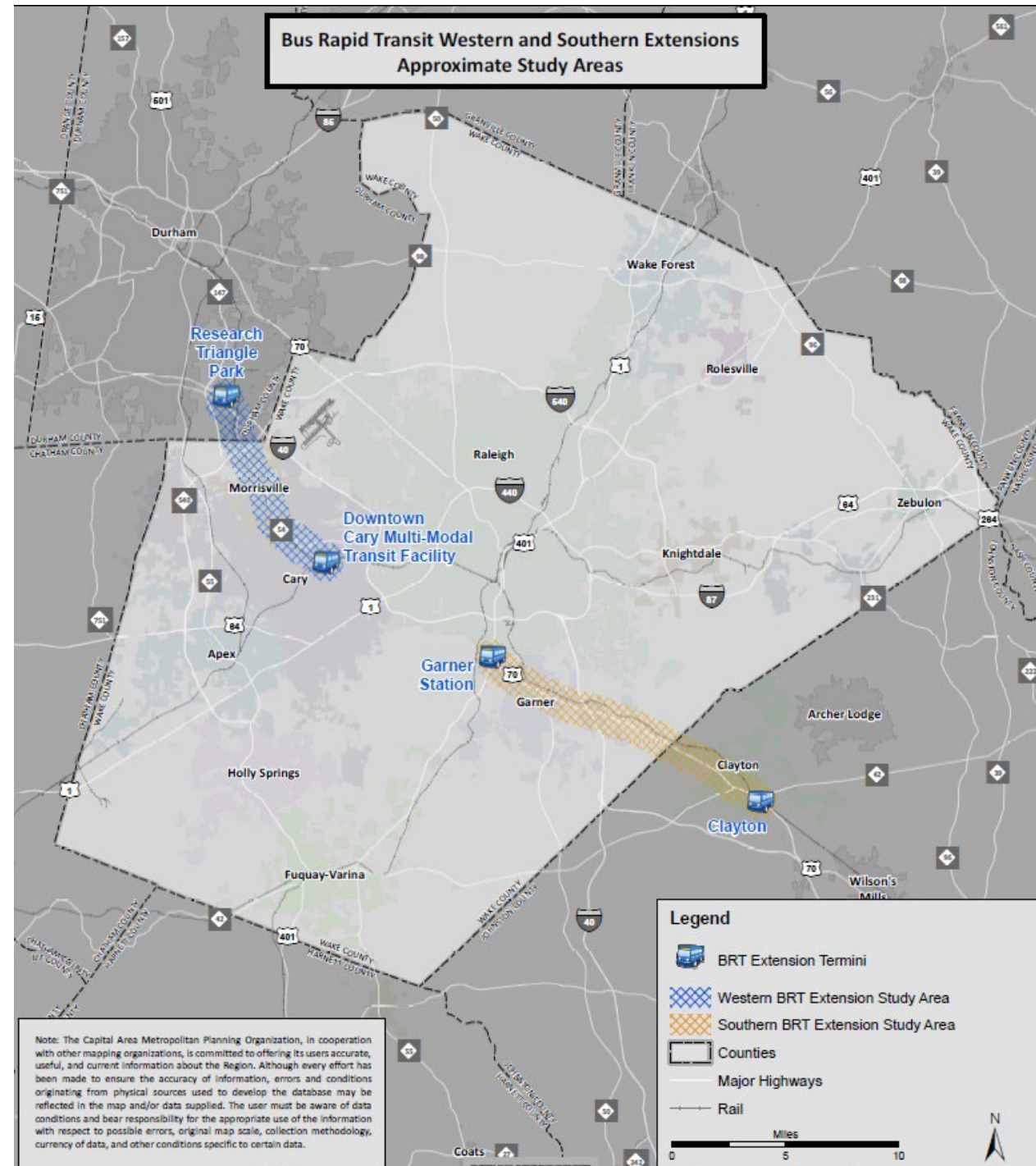


- Three rounds of public engagement
- Business + colleges
- Focus groups
- Local governments
- Railroads



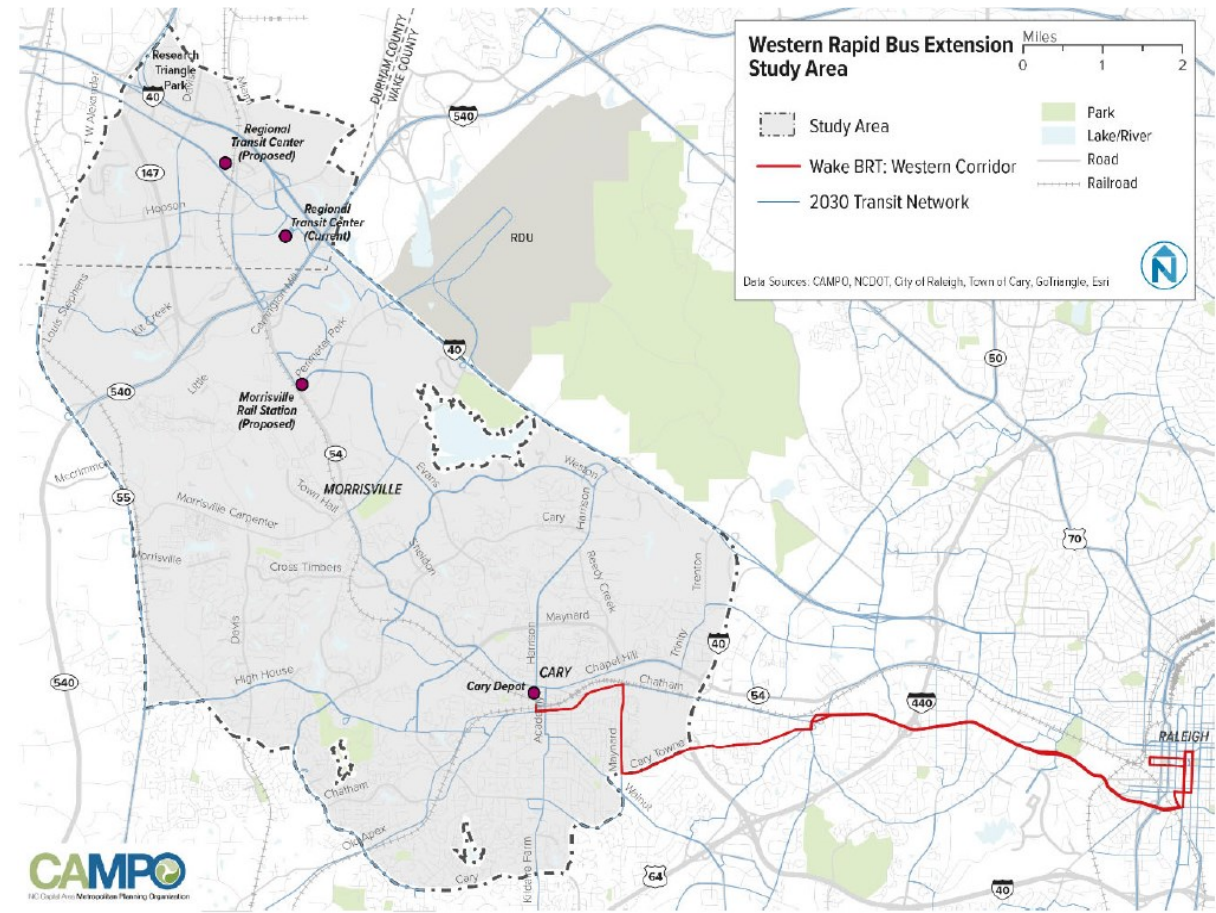
Bus Rapid Transit (BRT) Extension Regional Context

- Extensions of core BRT corridors in the Western and Southern corridors.
- Connections from Garner to Clayton and downtown Cary to RTP.
- Ensure diverse travel market is served by appropriate transit service
- Could provide 1st / last mile solutions for CRT.

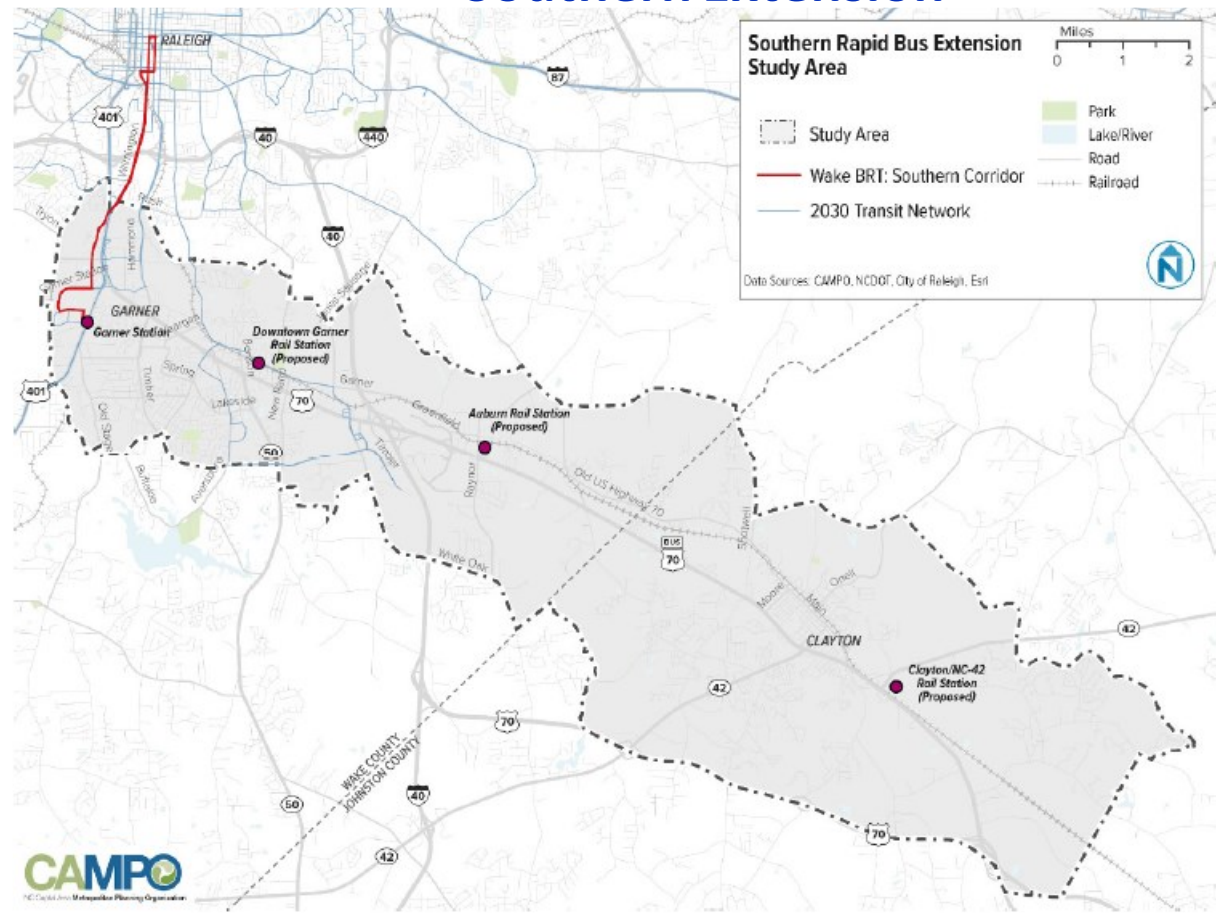


Bus Rapid Transit Extension Study Areas

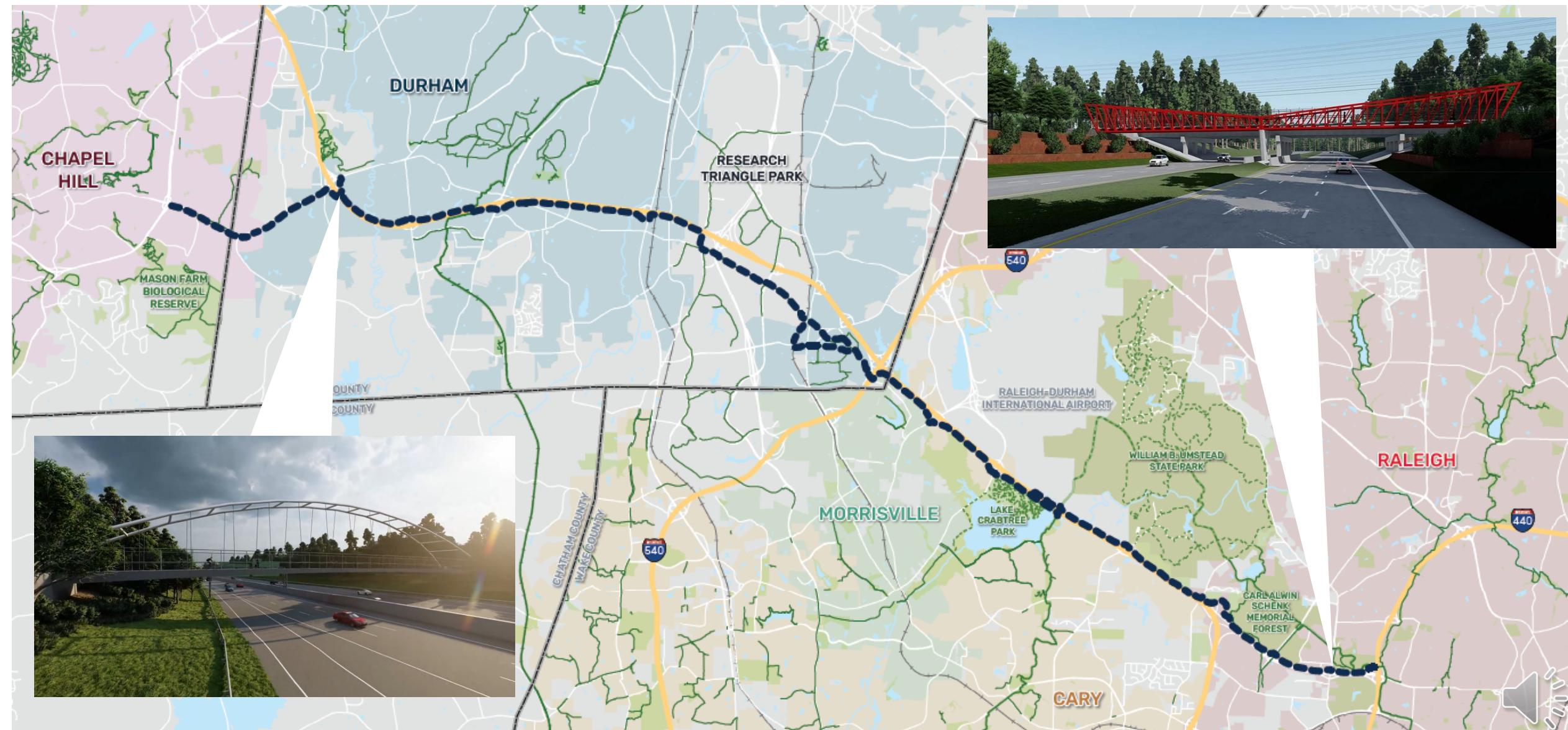
Western Extension



Southern Extension













Triangle Bikeway Preferred Alignment



Triangle Bikeway Typical Section

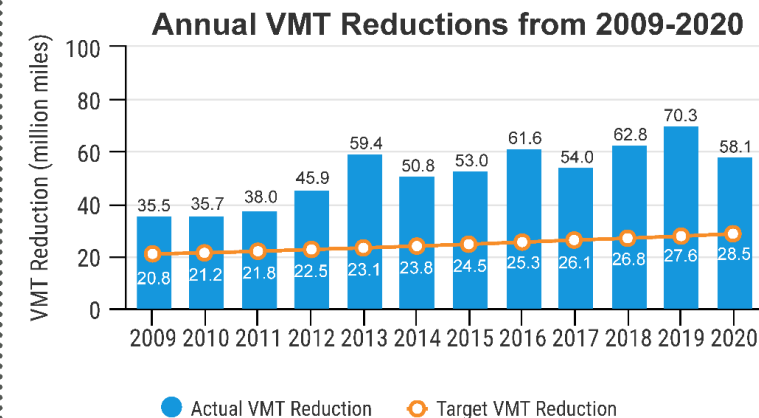


Transportation Demand Management (TDM)

IMPACTS OF TDM IN FY2020:		
	5.1 million vehicle trips avoided	That's nearly 89,000 days not spent driving a car 
	2.4 million gallons of gas saved	It would take almost 284 tanker trucks to hold that much gas 
	58 million commute miles reduced	That's roughly 20,000 trips from San Francisco to New York 
	46,800 alternative transportation users supported	If all those users drove single-file, the traffic jam would stretch 133 miles 
	47 million pounds of Carbon dioxide (CO2) release prevented	That reduction would require 2,600 homes not using electricity for a year 

TDM is a critical element of our transportation management strategies.

Securing long term commitments from NCDOT for the program is key to future success



Strengthen Support for Demand Management & Technology
A Triangle Metro Region Transportation Priority

Stabilize and grow state investment in Transportation Demand Management (TDM) to match local and regional commitments. Implement the Regional Technology (ITS) Plan for roadways and transit.

The most cost-effective dollar spent is on efficiently managing the demand for the supply of roads we already have. Working with employers on ways to offer workers alternatives to peak-hour, drive-alone commuting and deploying technologies to maximize the roadway supply are key elements of the smart city movement.

The Triangle TDM program has reduced vehicle miles traveled by over 300 million miles over the past 5 years.

The Triangle Metro Region is already a leader in the state in deploying emerging technologies and demand management solutions that optimize roadway and transit capital projects. Two key focus areas should be:

- Taking the already successful Regional Transportation Demand Management Partnership to the next level.
- A three-pronged approach to Smart Cities Technology Applications that optimizes how we travel and paves the way for automated, connected vehicles.

Regional Transportation Demand Management Partnership

What success looks like: NCDOT, the Triangle Metro's MPOs and key partners collaborate to recruit, recognize and reward employers and communities that implement different tiers of Transportation Demand Management practices.

Employer Success

Key Ingredients

- A regional collaboration between NCDOT, both MPOs and Triangle J COG with 14 competitively-selected service providers.
- Employer-focused with emphasis on anchor institutions, city centers and the RTP
- Coordinated outreach, including virtual webinars on telecommuting during COVID.

Success Metrics (FY19)

- 6.5 million vehicle trips avoided
- 70 million commute miles reduced
- 2.9 million gallons of gas saved
- 58 million pounds of carbon dioxide release prevented
- 32 designated Best Workplaces for Commuters

BEST
Workplaces for Commuters



Complete Corridors: US 70/Glenwood Ave.

Current TIP/STIP includes funded projects along the US 70 corridor between Raleigh and Durham.

Challenge will be to ensure these investments are multimodal and fit the future corridor context:

- Transit Signal Priority/BOSS
- Interregional Bicycle / Pedestrian connections
- Managed Freeways as appropriate
- Access to support future land use priorities



Complete Corridors - Managed Roadways



Image courtesy of VicRoads



Image courtesy of Transport UK

- Synchronizes flow of vehicles entering a freeway to available capacity on the freeway
- Provides real time demand management to manage traffic
- Interchanges coordinate with one another to prevent excessive wait times and queuing for all interchanges, metering rates differ for each ramp
- Future infrastructure to vehicle communications
- Better coordination with transit priority

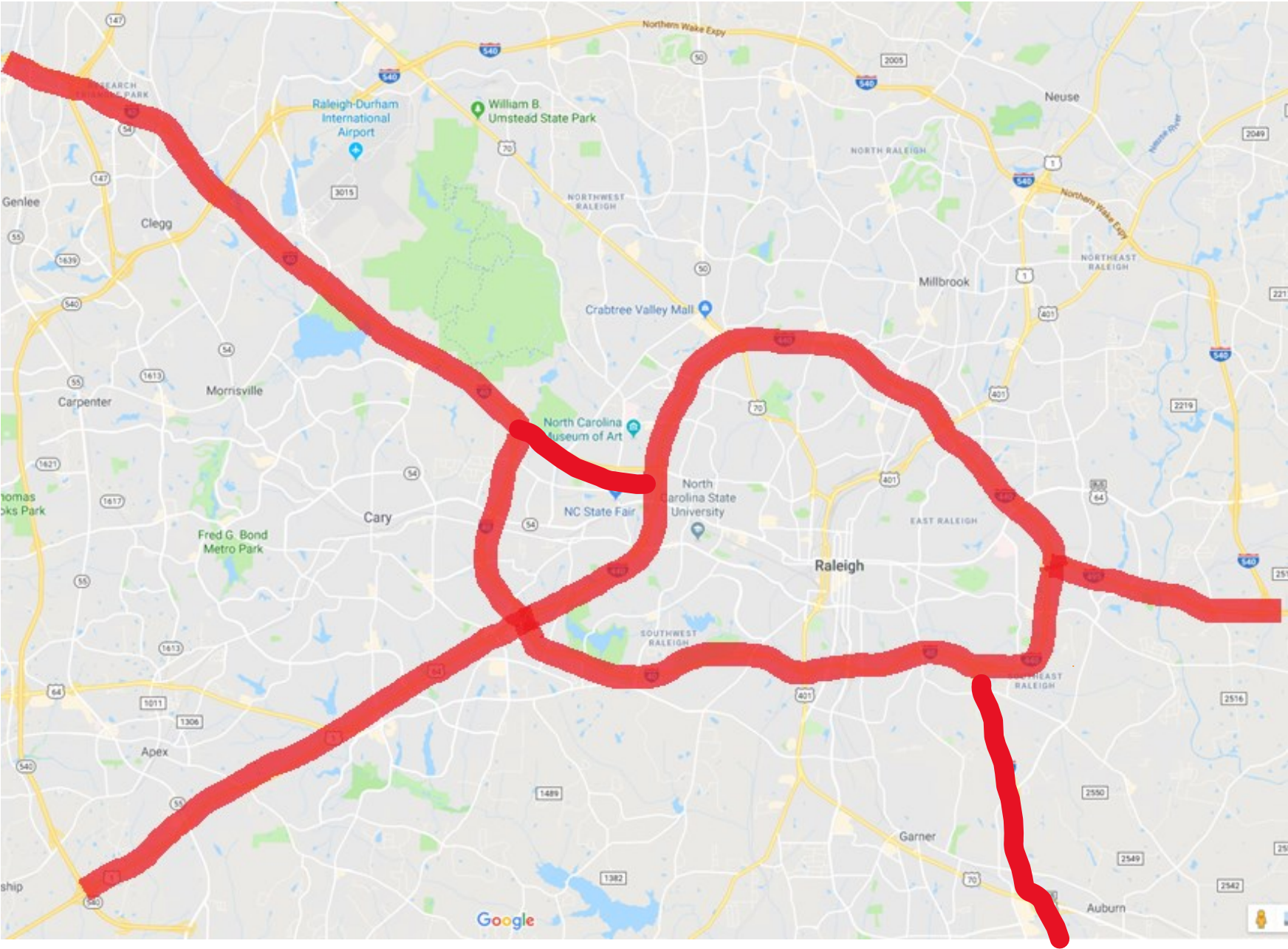


Image courtesy of VicRoads

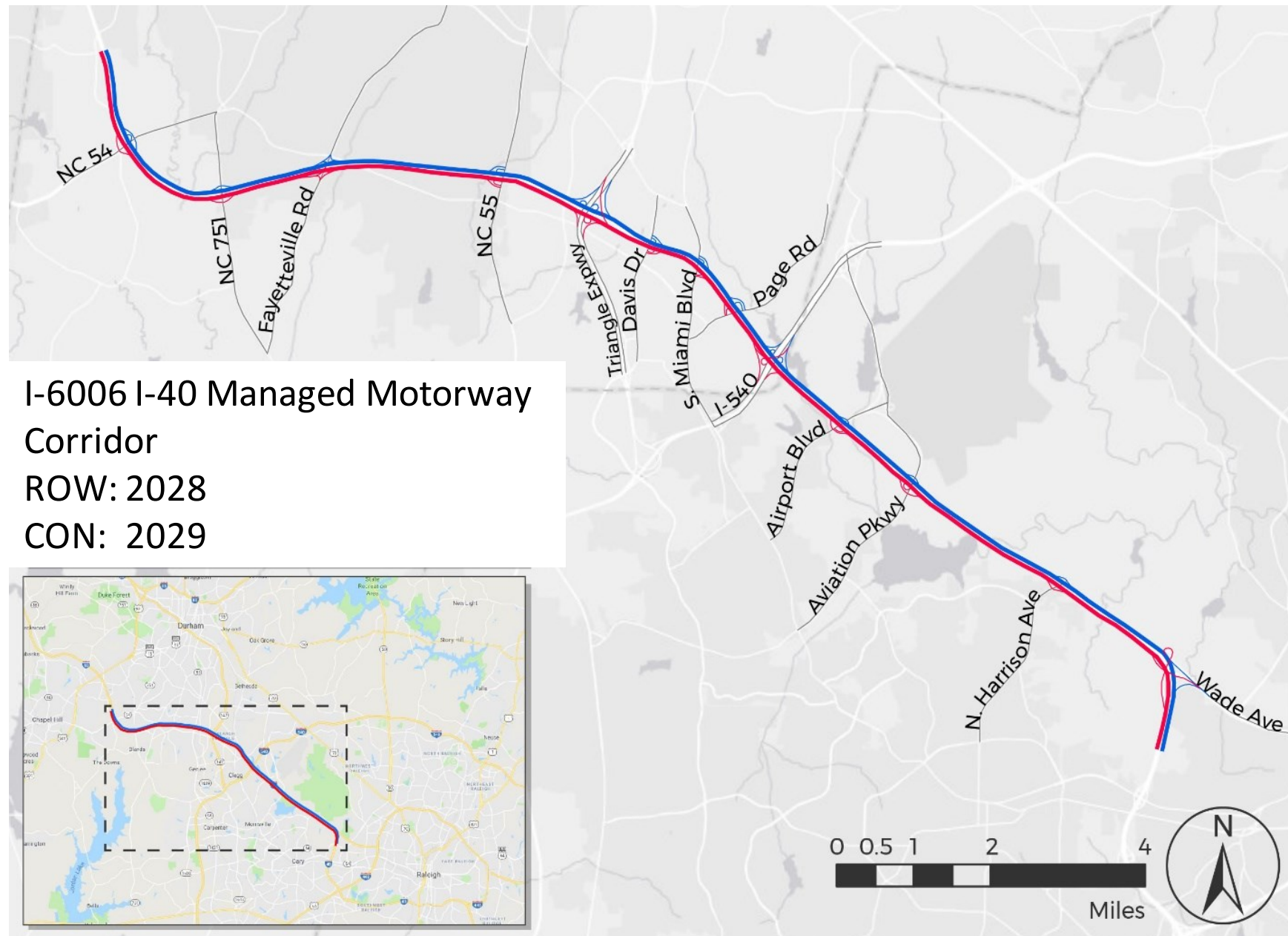


Triangle Region - Managed Roadways Phase 1 & 2

Project	ROW	CON
I-6006	2028	2029
U-6101	2029	Post-Years



Joint Section of Triangle Managed Roadways System



Next Steps on *Connect2050*

- Draft preferred scenario from each MPO – shared regional investments need to be consistent, but each MPO selects its own projects
 - CAMPO: September 15
 - DCHC MPO: October 13
- Public engagement on the scenario
- Adoption of projects by decade and fiscal constraint for final plan
- Air Quality Conformity Process
- Preparation of Final Report and supporting material

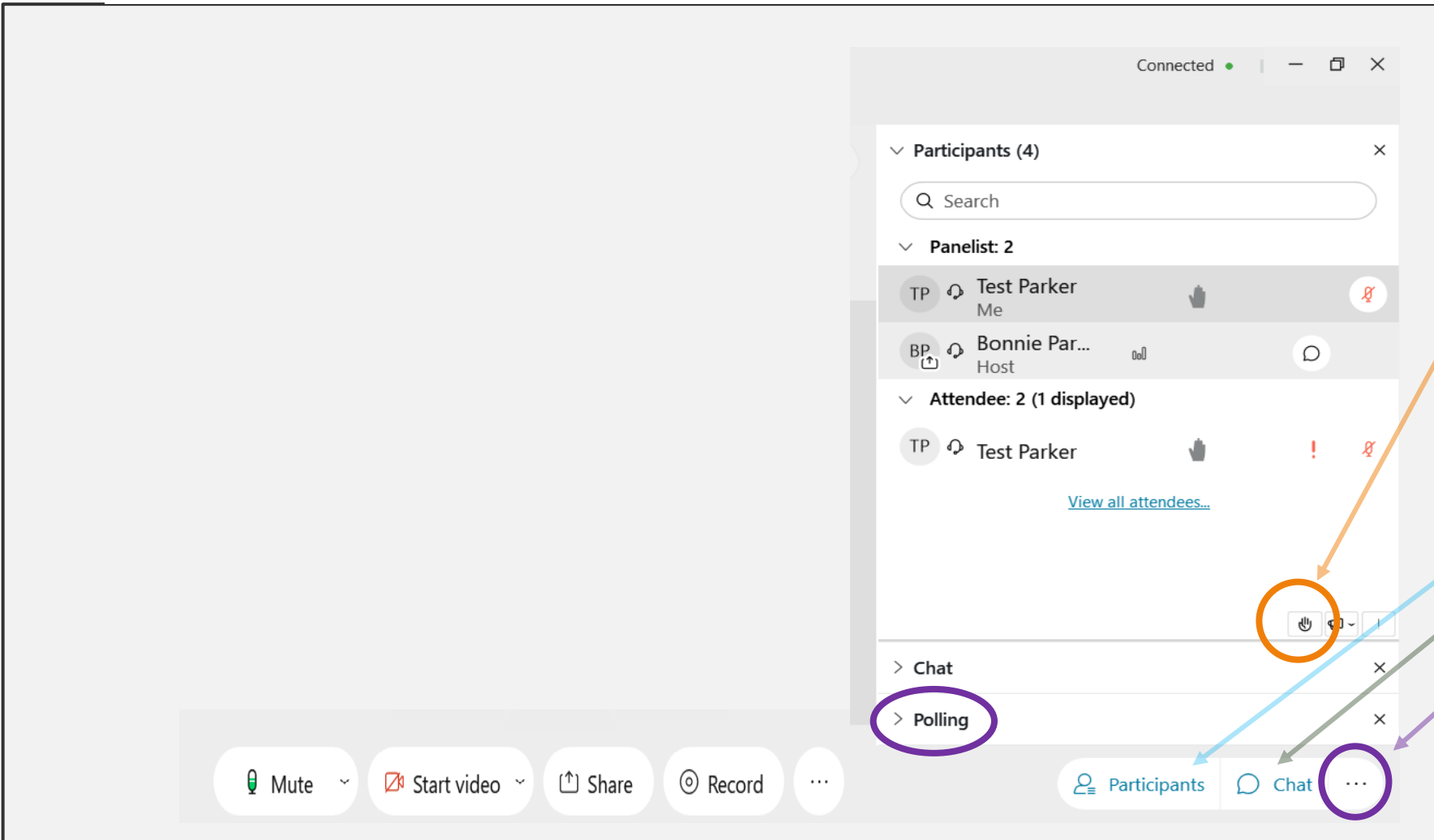


Flow of Discussion Among MPO Ex. Board/Board Members

- **Begin with Clarifying Questions via Chat/Raised Hands**
 - Brief questions for clarification on anything you have heard
- Poll Questions
- Discussion via Chat/Raised Hands
 - Broader conversation and discussion



Webex Panels (typically on the right)



✓ How to Raise your hand

- Bottom of the Participants Panel, Click on **Hand icon**

✓ How to Open Panels

1. **Participants Panel**
2. **Chat Panel**
3. **Polling Panel**



Poll Questions

For Ex. Board/Board Members

1. How supportive are you of the Opportunity Places land use that
 - a. Provides more affordable housing on publicly controlled land
 - b. Increases development on university campuses
 - c. Increases capacity for development in designated activity hubs
 - d. Increases capacity for mixed-use development on frequent transit lines

2. How supportive are you of the All Together fiscal constraint that:
 - a. Includes MPO “fair shares” of *NC First* additional state revenues
 - b. Includes additional local/regional revenues dedicated to mobility

3. How supportive are you of the proposed package of Shared Regional Investments?

*Remember
to click
“Submit”*



Discussion Among Ex. Board/Board Members

via Chat/Raised Hands



ADJOURN

Presentation Slides

<https://campo.legistar.com/Calendar.aspx>

Thank you for your Participation!

